

APPLICATION FOR CERTIFICATION

On Behalf of

TP-LINK Technologies Co., Ltd.

Wireless N Router

Model Number: TL-WR841ND; TL-WR841N

Prepared for : TP-LINK Technologies Co., Ltd.  
Building 7, Second Part, Honghualing Industrial Zone,  
Xili town, Nanshan District, Shenzhen, China

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Report Number : ACS-F08187  
Date of Test : Mar.17~May.27, 2008  
Date of Report : May.28, 2008

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## TEST REPORT CERTIFICATION

Applicant : TP-LINK Technologies Co., Ltd.  
 Manufacturer : TP-LINK Technologies Co., Ltd.  
 EUT Description : Wireless N Router  
 (A) MODEL NO. : TL-WR841ND; TL-WR841N  
 (B) SERIAL NO. : N/A  
 (C) POWER SUPPLY : DC 12V From Adapter

## Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart C 2007

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both radiated and conducted emissions.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Date of Test : \_\_\_\_\_ Mar.17~May.27, 2008

Prepared by : \_\_\_\_\_  
*Selina Liu*  
 Selina Liu / Assistant

Reviewer : \_\_\_\_\_  
*Jamy Yu*  
 Jamy Yu / Senior Engineer

Approved & Authorized Signer : \_\_\_\_\_  
 Ken Lu / Deputy Manager



## 1. SUMMARY OF STANDARDS AND RESULTS

### 1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

| EMISSION                    |   |         |
|-----------------------------|---|---------|
| Description of Test Item    | Standard  | Results |
| Conducted Emission Test     | FCC Part 15: 15.207<br>ANSI C63.4: 2003<br>KDB58074 | PASS    |
| Radiated Emission Test      | FCC Part 15: 15.209<br>ANSI C63.4: 2003<br>KDB58074 | PASS    |
| 6dB Bandwidth Test          | FCC Part 15: 15.247<br>KDB58074                     | PASS    |
| Output Power Test           | FCC Part 15: 15.247<br>KDB58074                     | PASS    |
| Band Edge Compliance Test   | FCC Part 15: 15.247<br>KDB58074                     | PASS    |
| Power Spectral Density Test | FCC Part 15: 15.247<br>KDB58074                     | PASS    |
| MPE ESTIMATION              | FCC Part 2: 2.1093                                  | PASS    |
| Antenna requirement         | FCC Part 15: 15.203                                 | PASS    |

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

|                       |   |   |
|-----------------------|---|---|
| Product name          | : | Wireless N Router   |
| Model Number          | : | TL-WR841ND; TL-WR841N<br><br>The differences between them are:<br>TL-WR841N router with two fixed antennas and The TL-WR841ND router with two detachable antennas.<br>According to technical characteristic, this difference only influence radiated emissions from 30MHz to 1GHz. So only the radiated emissions from 30MHz to 1GHz were tested with two models, and the other items were only tested with TL-WR841ND. |
| Operation frequency   | : | IEEE 802.11b/g ,802.11n HT20:2412MHz---2462MHz<br>IEEE802.11n HT40:2422MHz----2452MHz   |
| Channel Number        | : | IEEE 802.11b/g, 802.11n HT20:11 Channels<br>IEEE 802.11n HT40 :7 Channels   |
| Modulation Technology | : | DSSS for IEEE 802.11b and OFDM for IEEE 802.11g<br>OFDM for IEEE802.11n   |
| Data Rate             | : | IEEE 802.11b: 11/5.5/2/1Mbps.<br>IEEE 802.11g: 54/48/36/24/18/12/9/6Mbps.<br>IEEE 802.11n HT20 : 130, 117 ,104, 78, 65, 58.5, 52, 39, 26, 19.5,13, 6.5 Mbps<br>IEEE 802.11n HT40 : 270, 243 ,216, 162, 135, 121.5, 108, 81, 54,40.5, 27, 13.5Mbps   |
| Output power          | : | 24.36dBm(Maximum measured)  |
| Power                 | : | DC 12V from adapter AC 120V/60Hz  |
| Antenna Assembly Gain | : | 3dBi (maximum)  |
| Applicant             | : | TP-LINK Technologies Co., Ltd.<br>Building 7, Second Part, Honghualing Industrial Zone, Xili town, Nanshan District, Shenzhen, China  |
| Manufacturer          | : | TP-LINK Technologies Co., Ltd.<br>Building 7, Second Part, Honghualing Industrial Zone, Xili town, Nanshan District, Shenzhen, China  |
| Power Adapter         | : | Manufacture: LEADER ELECTRONICS INC.<br>M/N: MT12-4120100-A1<br>Cable: Unshielded, Detectable, 2.0m   |
| Date of Test          | : | Mar.17~May.27, 2008   |

|                 |                        |
|-----------------|------------------------|
|                 |                        |
| Date of Receipt | : Mar.20, 2008         |
| Sample Type     | : Prototype production |

## 2.2.Tested Supporting System Details

### 2.2.1.NOTEBOOK

M/N : PP09S  
 S/N : N/A  
 Manufacturer : DELL  
 Power Adaptor : Manufacturer: DELL,  
                   M/N: LA65NS1-00  
                   Cable: Unshielded, Detachable,  
                   4.0m  
                   (Bond one ferrite core)

### 2.2.2.CABLE

Lan Cable(a) : Unshielded, Detachable, 10m  
 Lan Cable(b) : Unshielded, Detachable, 1.5m

## 2.3.Data rate VS power

| Mode     | Data rate(Mbps) | CH  | chain 1    | chain2     | Result            |
|----------|-----------------|-----|------------|------------|-------------------|
|          |                 |     | Level(dBm) | Level(dBm) | Total Power (dBm) |
| 11b      | 1               | CH6 | 17.81      | 17.72      | 20.78             |
|          | 2               | CH6 | 17.53      | 17. 56     | <b>20.56</b>      |
|          | 5.5             | CH6 | 17.37      | 17. 28     | <b>20.34</b>      |
|          | 11              | CH6 | 16.78      | 16. 9      | <b>19.85</b>      |
| 11g      | 6               | CH6 | 19.41      | 19.84      | <b>22.64</b>      |
|          | 9               | CH6 | 19.10      | 19. 25     | <b>22.19</b>      |
|          | 12              | CH6 | 19.11      | 19. 24     | <b>22.19</b>      |
|          | 18              | CH6 | 18.79      | 18. 93     | <b>21.87</b>      |
|          | 24              | CH6 | 19.24      | 19. 23     | <b>22.25</b>      |
|          | 36              | CH6 | 19.35      | 19. 56     | <b>22.47</b>      |
|          | 48              | CH6 | 19.38      | 19. 42     | <b>22.41</b>      |
|          | 54              | CH6 | 19.20      | 19. 23     | <b>22.23</b>      |
| 11n HT20 | 130             | CH6 | 19.50      | 19. 42     | <b>22.47</b>      |
|          | 117             | CH6 | 19.45      | 19. 71     | <b>22.59</b>      |
|          | 104             | CH6 | 19.23      | 19. 38     | <b>22.32</b>      |
|          | 78              | CH6 | 19.14      | 19. 35     | <b>22.26</b>      |
|          | 65              | CH6 | 19.28      | 19. 65     | <b>22.48</b>      |
|          | 58. 5           | CH6 | 19.21      | 19. 74     | <b>22.49</b>      |
|          | 52              | CH6 | 19.47      | 19. 28     | <b>22.39</b>      |
|          | 39              | CH6 | 19.50      | 19. 27     | <b>22.40</b>      |

|   |       |     |       |       |              |
|---|-------|-----|-------|-------|--------------|
|   | 26    | CH6 | 19.38 | 19.14 | <b>22.27</b> |
|   | 19.5  | CH6 | 19.22 | 19.32 | <b>22.28</b> |
|   | 13    | CH6 | 19.05 | 19.41 | <b>22.24</b> |
|   | 6.5   | CH6 | 19.69 | 19.9  | <b>22.81</b> |
| 11N<br>HT40   | 13.5  | CH4 | 21.73 | 20.93 | <b>24.36</b> |
|   | 27    | CH4 | 21.57 | 20.47 | <b>24.07</b> |
|   | 40.5  | CH4 | 21.45 | 20.56 | <b>24.04</b> |
|   | 54    | CH4 | 21.34 | 20.63 | <b>24.01</b> |
|   | 81    | CH4 | 21.56 | 20.79 | <b>24.20</b> |
|   | 108   | CH4 | 21.70 | 20.18 | <b>24.02</b> |
|   | 121.5 | CH4 | 21.45 | 20.47 | <b>24.00</b> |
|   | 135   | CH4 | 21.09 | 20.59 | <b>23.86</b> |
|   | 162   | CH4 | 21.43 | 20.8  | <b>24.14</b> |
|   | 216   | CH4 | 21.44 | 20.45 | <b>23.98</b> |
|   | 243   | CH4 | 21.46 | 20.39 | <b>23.97</b> |
|   | 270   | CH4 | 21.52 | 20.54 | <b>24.07</b> |
| When IEEE 802.11b's data rate was 1Mbps ; IEEE 802.11g's data rate is 6Mbps,IEEE 802.11n HT20's data rate is 6.5Mbps;IEEE802.11n HT40's data rate is 13.5Mbps the EUT have maximum output power and all the test was performed in this data rate set. |       |     |       |       |              |

## 2.4. Test Facility

### Site Description

|                           |   |  |
|---------------------------|---|--|
| Name of Firm              | : | Audix Technology (Shenzhen) Co., Ltd.<br>No. 6, Ke Feng Rd., 52 Block, Shenzhen<br>Science & Industrial Park,Nantou,<br>Shenzhen, Guangdong, China |
| 3m Anechoic Chamber       | : | Jun. 13, 2006 File on Federal<br>Communication Commission<br>Registration Number: 90454  |
| 3m & 10m Anechoic Chamber | : | Jan. 31, 2007 File on Federal<br>Communication Commission<br>Registration Number: 794232   |
| EMC Lab.                  | : | Accredited by DATech, German<br>Registration Number: DAT-P-091/99-01<br>Feb. 02, 2004  |
|                           |   | Accredited by NVLAP, USA<br>NVLAP Code: 200372-0<br>Apr. 01, 2007  |

## 2.5. Measurement Uncertainty

| No. | Item                                    | Uncertainty |
|-----|---|-------------|
| 1.  | Uncertainty for Conducted Emission Test | 1.22dB      |

|    |   |                       |
|----|---|-----------------------|
| 2. | Uncertainty for Radiated Emission Test<1GHz | 4.62dB                |
| 3. | Uncertainty for Radiated Emission Test>1GHz | 4.79dB                |
| 4. | Uncertainty for Frequency measure           | $0.42 \times 10^{-6}$ |
| 5. | Uncertainty for conducted power measure     | 0.112                 |

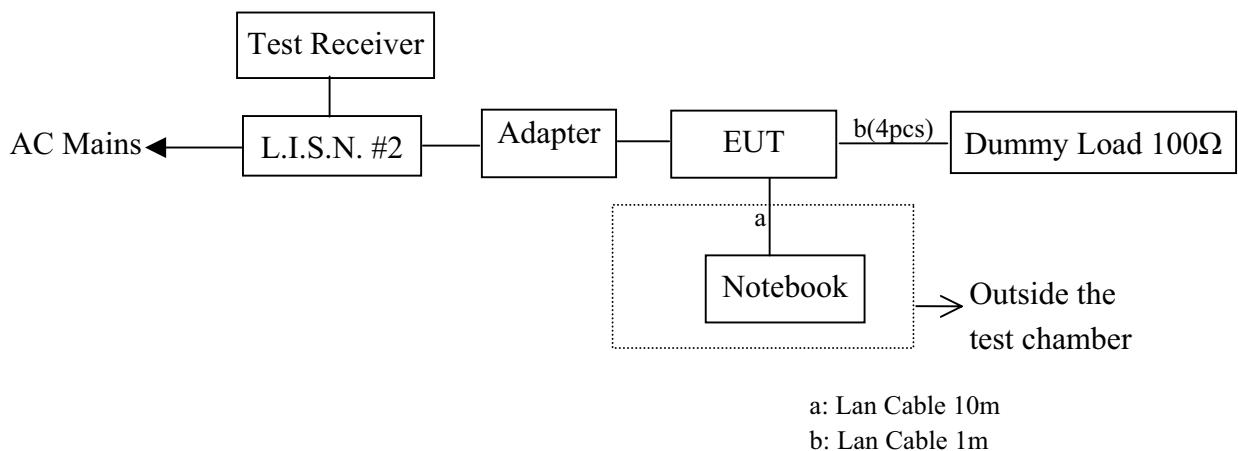
### 3. POWER LINE CONDUCTED EMISSION TEST

#### 3.1. Test Equipments

| Item | Equipment      | Manufacturer    | Model No. | Serial No.    | Last Cal.  | Cal. Interval |
|------|----------------|-----------------|-----------|---------------|------------|---------------|
| 1.   | Test Receiver  | Rohde & Schwarz | ESHS10    | 838693/001    | Dec.19, 07 | 1 Year        |
| 2.   | L.I.S.N.#2     | Kyoritsu        | KNW-407   | 8-1636-1      | May 11, 07 | 1 Year        |
| 3.   | Terminator     | Hubersuhner     | 50Ω       | No. 1         | May 11, 07 | 1 Year        |
| 4.   | RF Cable       | Fujikura        | 3D-2W     | LISN Cable 1# | Jan.09, 08 | 1/2 Year      |
| 5.   | Coaxial Switch | Anritsu         | MP59B     | M55367        | Jan.09, 08 | 1/2 Year      |
| 6.   | Pulse Limiter  | Rohde & Schwarz | ESH3-Z2   | 100340        | Jan.09, 08 | 1/2 Year      |

#### 3.2. Block Diagram of Test Setup

##### 3.2.1. Block diagram of connection between the EUT and simulators



(EUT: Wireless N Router)

#### 3.3. Power Line Conducted Emission Test Limits

| Frequency       | Maximum RF Line Voltage    |                         |
|-----------------|----------------------------|-------------------------|
|                 | Quasi-Peak Level<br>dB(µV) | Average Level<br>dB(µV) |
| 150kHz ~ 500kHz | 66 ~ 56*                   | 56 ~ 46*                |
| 500kHz ~ 5MHz   | 56                         | 46                      |
| 5MHz ~ 30MHz    | 60                         | 50                      |

Notes: 1. \* Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

#### 3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

##### 3.4.1. Wireless N Router (EUT)

Model Number : TL-WR841ND

Serial Number : N/A

Manufacturer : TP-LINK Technologies Co., Ltd.

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.2..

### 3.5.Operating Condition of EUT

- 3.5.1.Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2.Turn on the power of all equipment.
- 3.5.3.Notebook ran the Control program with a LAN port of the EUT through Lan cable, which can make the EUT work in test mode (TX mode)
- 3.5.4.The other ports of the EUT connected with 100Ω Dummy Load.

### 3.6.Test Procedure

The EUT is connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). This provides a 50 ohm coupling impedance for the EUT. Please refer the block diagram of the test setup and photographs. Power on the PC and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2003 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

The test result are reported on Section 3.7.

### 3.7.Power Line Conducted Emission Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

The EUT with the following test modes was tested and selected (mode 1) to read Q.P values and average values, all the test results are listed in next pages.

EUT: Wireless N Router      Model No. : TL-WR841ND

Test Date: Mar.31, 2008      Temperature: 23°C      Humidity: 54%

The details of test modes are as follows :

| No. | Test Mode | Reference Test Data No. |     |
|-----|-----------|-------------------------|-----|
|     |           | VA                      | VB  |
| 1.  | TX Mode   | # 2                     | # 1 |

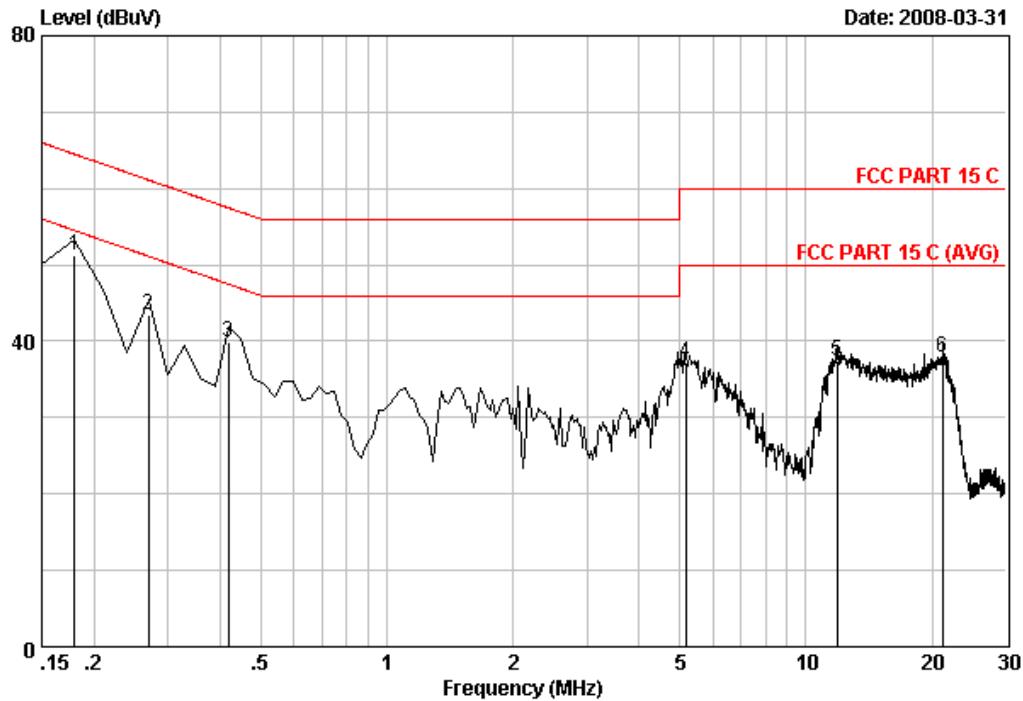


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Data: 2

File: D:\emc 002\DATA\2008 Report\TTP-LINK\ACS8Q343.EMI (3)

Date: 2008-03-31



Site no : AUDIX No.1 Conduction Data no : 2  
 Dis./Ant. : --- KNW407 VA (1#)  
 Limit : FCC PART 15 C  
 Env./Ins. : Temp:23' Humi:54% ESHS10 Engineer :Jamy  
 EUT : Wireless N Router M/N:TL-WR841ND  
 Power Rating : DC 12V From adapter 120V/60Hz  
 Test Mode : Tx mode  
 Memo :

| No | Freq (MHz) | LISN Factor (dB) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV) | Limits (dBuV) | Margin (dB) | Remark |
|----|------------|------------------|-----------------|----------------|-----------------------|---------------|-------------|--------|
| 1  | 0.18       | 0.18             | 10.15           | 40.90          | 51.23                 | 64.49         | 13.26       | QP     |
| 2  | 0.27       | 0.13             | 10.15           | 33.24          | 43.52                 | 61.14         | 17.62       | QP     |
| 3  | 0.42       | 0.08             | 10.14           | 29.72          | 39.94                 | 57.47         | 17.53       | QP     |
| 4  | 5.16       | 0.10             | 10.19           | 26.98          | 37.27                 | 60.00         | 22.73       | QP     |
| 5  | 11.88      | 0.23             | 10.26           | 26.97          | 37.46                 | 60.00         | 22.54       | QP     |
| 6  | 21.19      | 0.48             | 10.38           | 27.13          | 37.99                 | 60.00         | 22.01       | QP     |

Remarks: 1. Emission Level=LISN Factor+Cable Loss+Reading.  
 2. If the average limit is met when using a quasi-peak detector,  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

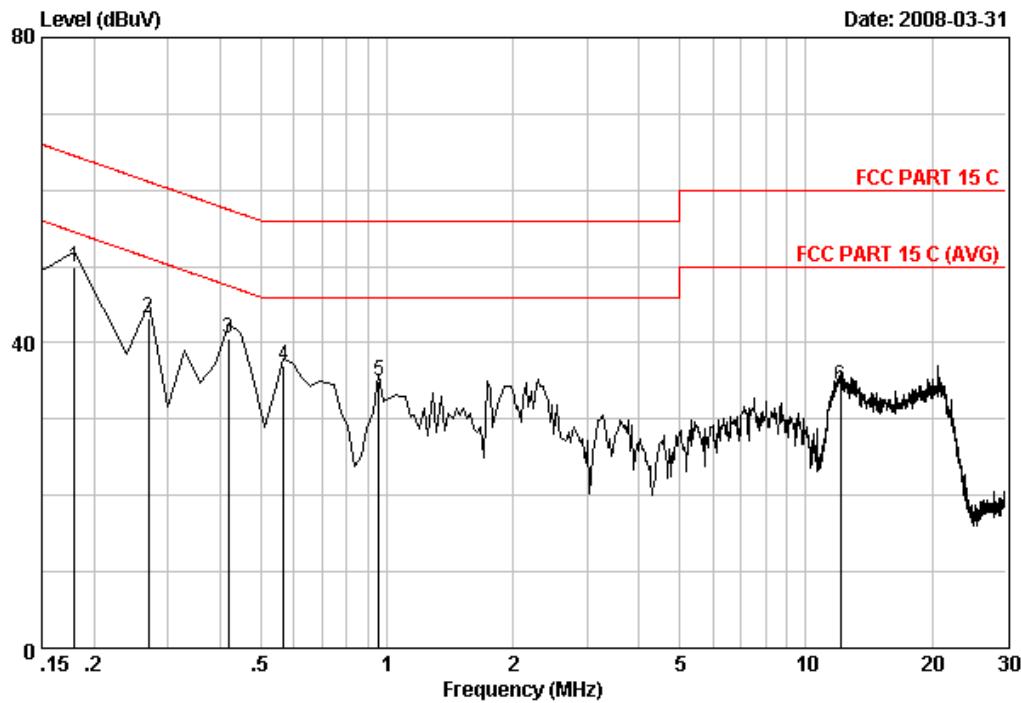


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Data: 1

File: D:\emc 002\DATA\2008 Report\TTP-LINK\ACS8Q343.EMI (3)

Date: 2008-03-31



Site no : AUDIX No.1 Conduction Data no : 1  
 Dis./Ant. : --- KNW407 VB (1#)  
 Limit : FCC PART 15 C  
 Env./Ins. : Temp:23' Humi:54% ESHS10 Engineer : Jamy  
 EUT : Wireless N Router M/N:TL-WR841ND  
 Power Rating : DC 12V From adapter 120V/60Hz  
 Test Mode : Tx mode  
 Memo :

| No | Freq (MHz) | LISN Factor (dB) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV) | Limits (dBuV) | Margin (dB) | Remark |
|----|------------|------------------|-----------------|----------------|-----------------------|---------------|-------------|--------|
| 1  | 0.18       | 0.19             | 10.15           | 39.62          | 49.96                 | 64.49         | 14.53       | QP     |
| 2  | 0.27       | 0.13             | 10.15           | 32.90          | 43.18                 | 61.14         | 17.96       | QP     |
| 3  | 0.42       | 0.08             | 10.14           | 30.26          | 40.48                 | 57.47         | 16.99       | QP     |
| 4  | 0.57       | 0.05             | 10.14           | 26.70          | 36.89                 | 56.00         | 19.11       | QP     |
| 5  | 0.96       | 0.04             | 10.15           | 24.80          | 34.99                 | 56.00         | 21.01       | QP     |
| 6  | 12.09      | 0.22             | 10.26           | 23.77          | 34.25                 | 60.00         | 25.75       | QP     |

Remarks: 1. Emission Level=LISN Factor+Cable Loss+Reading.  
 2. If the average limit is met when using a quasi-peak detector,  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

## 4. RADIATED EMISSION TEST

### 4.1. Test Equipment

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

#### 4.1.1. For Anechoic Chamber

Frequency rang: 30~1000MHz

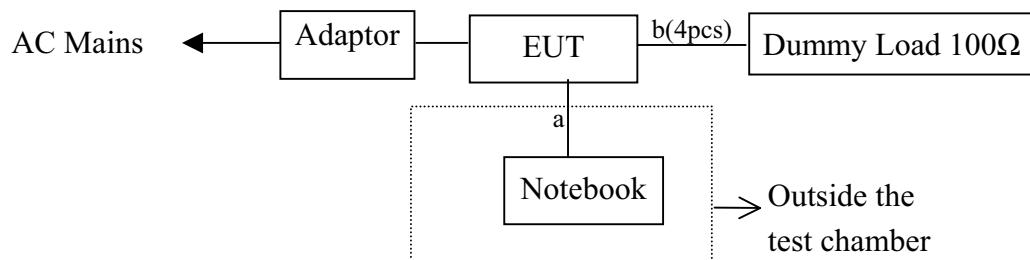
| Item | Equipment      | Manufacturer    | Model No. | Serial No.      | Last Cal.  | Cal. Interval |
|------|----------------|-----------------|-----------|-----------------|------------|---------------|
| 1.   | 3#Chamber      | AUDIX           | N/A       | N/A             | Dec.20.07  | 1/2 Year      |
| 2.   | EMI Spectrum   | Agilent         | E7403A    | MY42000106      | May 11, 07 | 1 Year        |
| 3.   | Test Receiver  | Rohde & Schwarz | ESVS20    | 830350/005      | Dec.19, 07 | 1 Year        |
| 4.   | Amplifier      | HP              | 8447D     | 2944A04738      | Jan.09, 08 | 1/2 Year      |
| 5.   | Bilog Antenna  | Schaffner       | CBL6111C  | 2598            | Feb.21, 08 | 1 Year        |
| 6.   | RF Cable       | JINGCHENG       | KLMR400   | 3# Chamber No.1 | Jan.09, 08 | 1/2 Year      |
| 7.   | RF Cable       | JINGCHENG       | JBY400    | 3# Chamber No.2 | Jan.09, 08 | 1/2 Year      |
| 8.   | RF Cable       | JINGCHENG       | JBY400    | 3# Chamber No.3 | Jan.09, 08 | 1/2 Year      |
| 9.   | RF Cable       | JINGCHENG       | JBY400    | 3# Chamber No.4 | Jan.09, 08 | 1/2 Year      |
| 10.  | Coaxial Switch | Anritsu         | MP59B     | M73989          | Jan.09, 08 | 1/2 Year      |

Frequency rang: above 1000MHz

| Item | Equipment | Manufacturer | Model No.   | Serial No. | Last Cal.   | Cal. Interval |
|------|-----------|--------------|-------------|------------|-------------|---------------|
| 1.   | Spectrum  | Agilent      | E4446A      | MY41440292 | May 11, 07  | 1 Year        |
| 2.   | Amp       | HP           | 8449B       | 3008A00863 | May 11, 07  | 1 Year        |
| 3.   | Antenna   | EMCO         | 3115        | 9607-4877  | Jan. 23, 07 | 1.5 Year      |
| 4.   | Antenna   | EMCO         | 3116        | 00060088   | May 28, 07  | 1 Year        |
| 5.   | HF Cable  | Hubersuhne   | Sucoflex104 | -          | May 11, 07  | 1 Year        |

### 4.2. Block Diagram of Test Setup

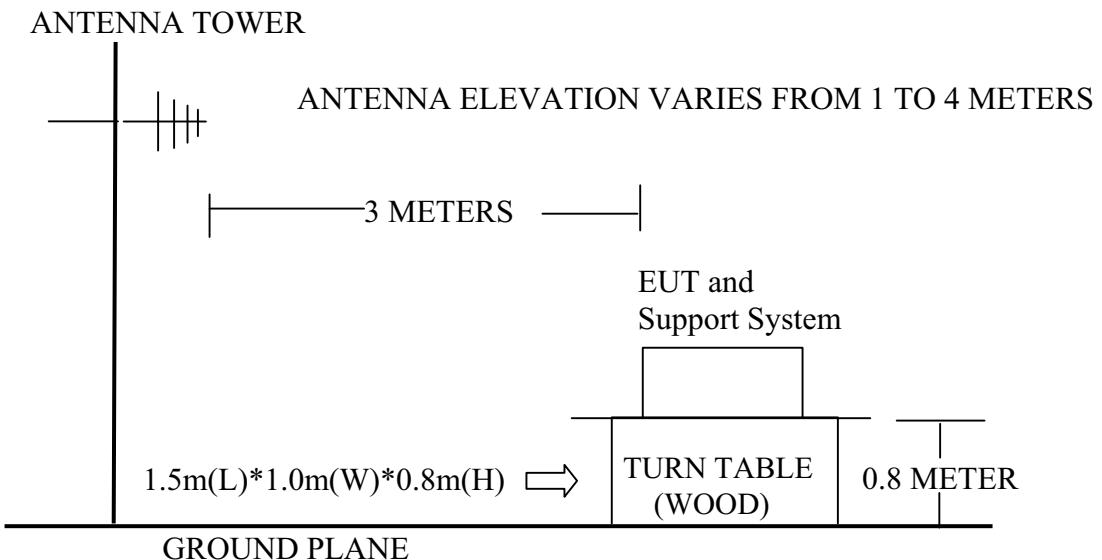
#### 4.2.1. Block diagram of connection between the EUT and simulators



a: Lan Cable 10m  
b: Lan Cable 1m

(EUT: Wireless N Router)

#### 4.2.2.In Anechoic Chamber



#### 4.3.Radiated Emission Limit

| FREQUENCY<br>MHz | DISTANCE<br>Meters | FIELD STRENGTHS LIMIT                                       |                |
|------------------|--------------------|---|----------------|
|                  |                    | $\mu$ V/m   | dB( $\mu$ V)/m |
| 30 ~ 88          | 3                  | 100   | 40.0           |
| 88 ~ 216         | 3                  | 150   | 43.5           |
| 216 ~ 960        | 3                  | 200   | 46.0           |
| 960 ~ 1000       | 3                  | 500   | 54.0           |
| Above 1000       | 3                  | 74.0 dB( $\mu$ V)/m (Peak)<br>54.0 dB( $\mu$ V)/m (Average) |                |

- Remark :
- (1) Emission level = Antenna Factor + Cable Loss + Reading
  - (2) The smaller limit shall apply at the cross point between two frequency bands.
  - (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

#### 4.4.EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

##### 4.4.1.Wireless N Router (EUT)

Model Number : TL-WR841ND

Serial Number : N/A

Manufacturer : TP-LINK Technologies Co., Ltd.

##### 4.4.2.Support Equipment : As Tested Supporting System Detail, in Section 2.2.

#### 4.5.Operating Condition of EUT

- 4.5.1.Setup the EUT and simulator as shown as Section 4.2.
- 4.5.2.Turn on the power of all equipment.
- 4.5.3.Notebook ran the Control program with a LAN port of the EUT through Lan cable, which can make the EUT work in test mode (TX mode)
- 4.5.4.The other ports of the EUT connected with  $100\Omega$  Dummy Load.

#### 4.6.Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS20) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW 10Hz VBW for average emission above 1GHz

The frequency range from 30MHz to 10<sup>th</sup> harmonic are checked.

#### 4.7.Radiated Emission Test Results

**PASS.**

The frequency range from 30MHz to 1000MHz and above 1GHz is investigated. Please see the following pages.

All the emissions 1GHz~4GHz and 18GHz~25GHz are peak measured and comply with average limit.

Frequency: 30MHz~1GHz

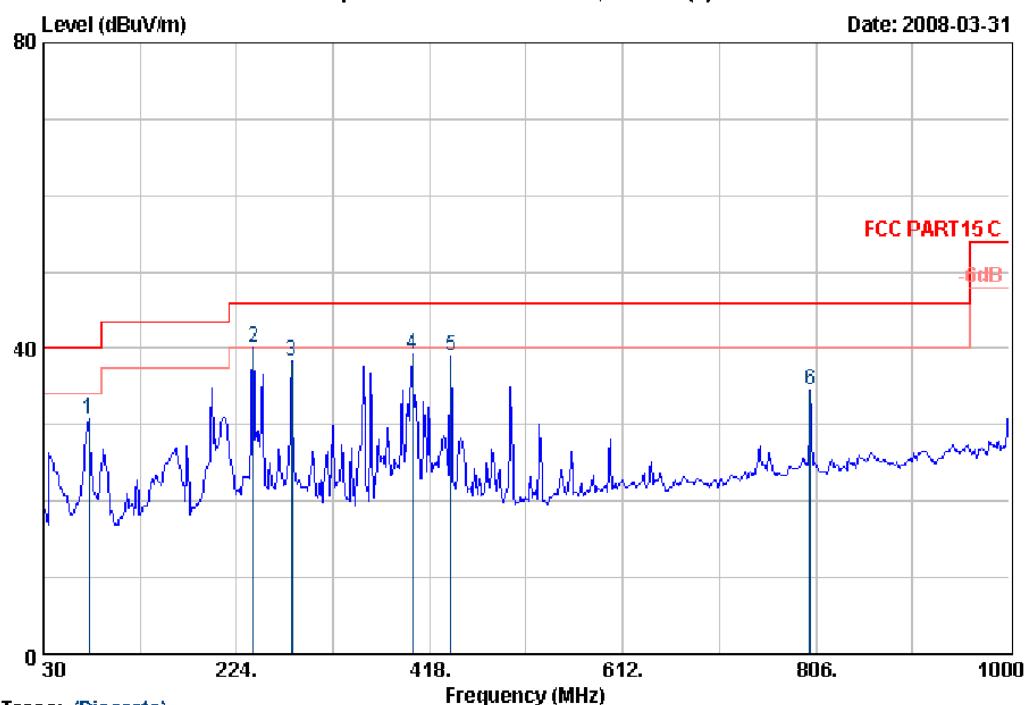


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Postcode:518057

Data: 1

File: D:\2008 Report Data\TTP-LINK\ACS8Q343.EMI (8)

Date: 2008-03-31



Trace: (Discrete)

Site no. : 3# Chamber Radiation Data no. : 1  
 Dis. / Ant. : 3m 2598 Ant. pol. : HORIZONTAL  
 Limit : FCC PART15 C  
 Env. / Ins. : 24°C/56% ESVS20 Engineer : Mario  
 EUT : Wireless N Router  
 Power Rating : DC 12V From Adapter AC 120V/60Hz  
 Test Mode : Tx Mode  
 M/N : TL-WR841N

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 75.59        | 7.32                     | 0.94                  | 22.48             | 30.74             | 40.00              | 9.26           | QP     |
| 2 240.49       | 11.88                    | 1.46                  | 26.68             | 40.02             | 46.00              | 5.98           | QP     |
| 3 279.29       | 13.30                    | 1.57                  | 23.37             | 38.24             | 46.00              | 7.76           | QP     |
| 4 400.54       | 16.53                    | 1.83                  | 20.76             | 39.12             | 46.00              | 6.88           | QP     |
| 5 439.34       | 17.08                    | 2.04                  | 19.88             | 39.00             | 46.00              | 7.00           | QP     |
| 6 800.18       | 21.80                    | 2.61                  | 10.24             | 34.65             | 46.00              | 11.35          | QP     |

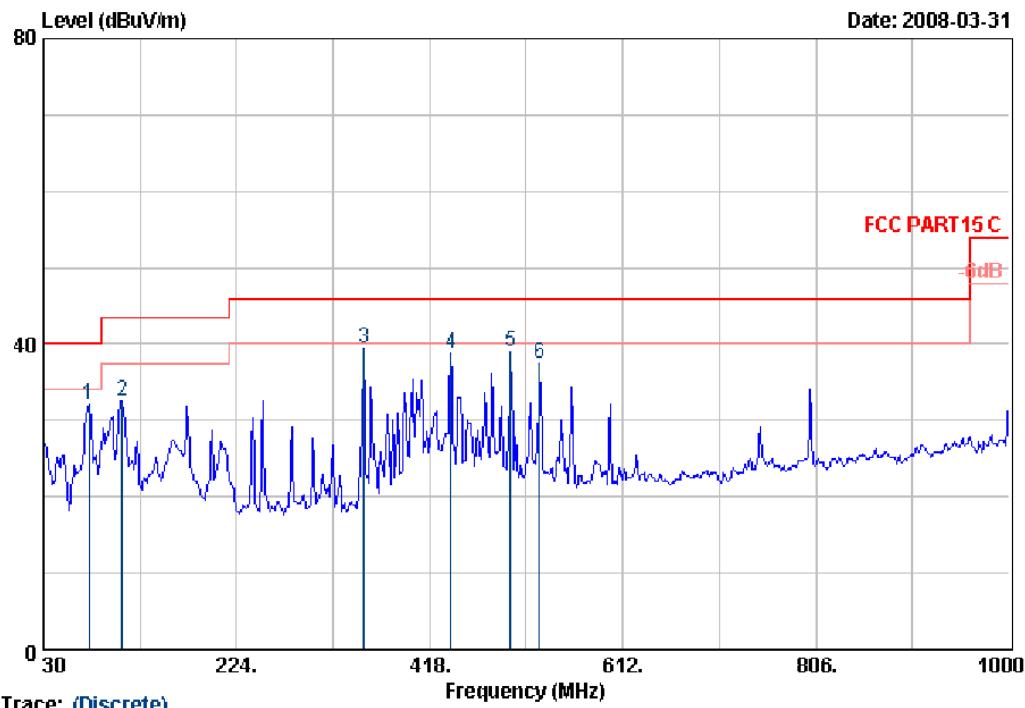
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.



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Data: 2 File: D:\2008 Report Data\TP-LINK\ACS8Q343.EMI (8)

Date: 2008-03-31



## Trace: (Discrete)

Site no. : 3# Chamber Radiation Data no. : 2  
 Dis. / Ant. : 3m 2598 Ant. pol. : VERTICAL  
 Limit : FCC PART15 C  
 Env. / Ins. : 24°C/56% ESVS20 Engineer : Mario  
 EUT : Wireless N Router  
 Power Rating : DC 12V From Adapter AC 120V/60Hz  
 Test Mode : Tx Mode  
 M/N : TL-WR841N

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Emission          |                   |                    |       | Margin<br>(dB) | Remark |
|----------------|--------------------------|-----------------------|-------------------|-------------------|--------------------|-------|----------------|--------|
|                |                          |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) |       |                |        |
| 1 75.59        | 7.32                     | 0.94                  | 23.80             | 32.06             | 40.00              | 7.94  | QP             |        |
| 2 109.54       | 11.30                    | 1.04                  | 20.28             | 32.62             | 43.50              | 10.88 | QP             |        |
| 3 352.04       | 15.28                    | 1.79                  | 22.37             | 39.44             | 46.00              | 6.56  | QP             |        |
| 4 439.34       | 17.08                    | 2.04                  | 19.56             | 38.68             | 46.00              | 7.32  | QP             |        |
| 5 499.48       | 18.10                    | 2.02                  | 18.84             | 38.96             | 46.00              | 7.04  | QP             |        |
| 6 528.58       | 18.40                    | 2.09                  | 17.01             | 37.50             | 46.00              | 8.50  | QP             |        |

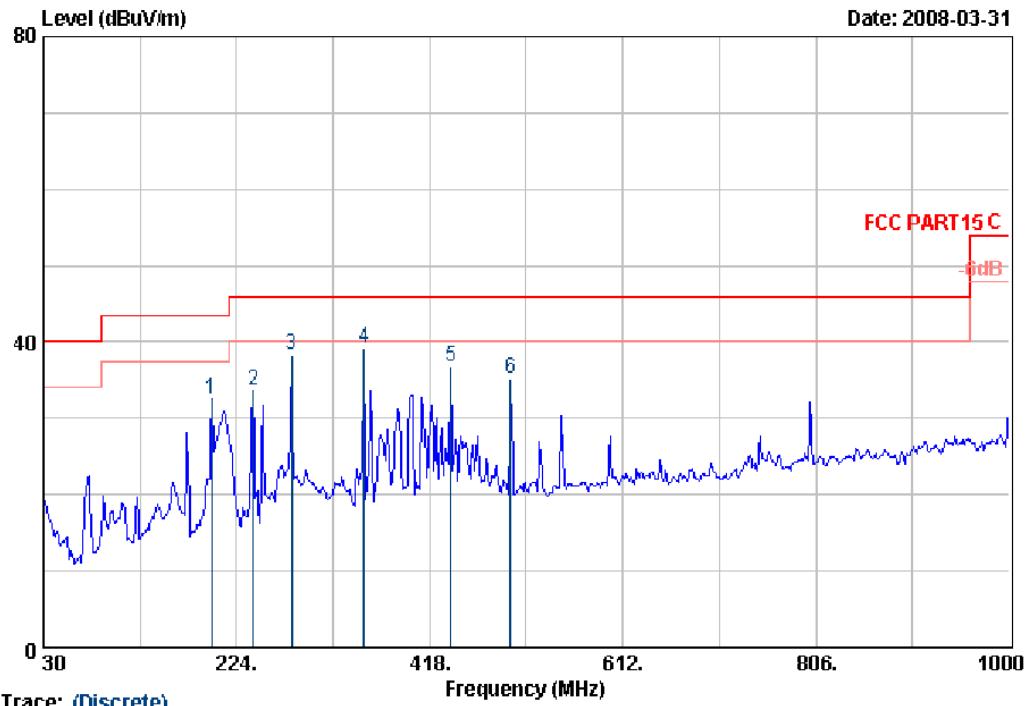
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 4 File: D:\2008 Report Data\T\TP-LINK\ACS8Q343.EMI (8)

Date: 2008-03-31



## Trace: (Discrete)

Site no. : 3# Chamber Radiation      Data no. : 4  
 Dis. / Ant. : 3m 2598      Ant. pol. : HORIZONTAL  
 Limit : FCC PART15 C  
 Env. / Ins. : 24°C/56% ESVS20      Engineer : Mario  
 EUT : Wireless N Router  
 Power Rating : DC 12V From Adapter AC 120V/60Hz  
 Test Mode : Tx Mode  
 M/N : TL-WR841ND

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Emission          |                   |                    |                |
|----------------|--------------------------|-----------------------|-------------------|-------------------|--------------------|----------------|
|                |                          |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |
| 1 198.78       | 10.04                    | 1.32                  | 21.15             | 32.51             | 43.50              | 10.99 QP       |
| 2 240.49       | 11.88                    | 1.46                  | 20.41             | 33.75             | 46.00              | 12.25 QP       |
| 3 279.29       | 13.30                    | 1.57                  | 23.41             | 38.28             | 46.00              | 7.72 QP        |
| 4 352.04       | 15.28                    | 1.79                  | 22.13             | 39.20             | 46.00              | 6.80 QP        |
| 5 439.34       | 17.08                    | 2.04                  | 17.75             | 36.87             | 46.00              | 9.13 QP        |
| 6 499.48       | 18.10                    | 2.02                  | 15.19             | 35.31             | 46.00              | 10.69 QP       |

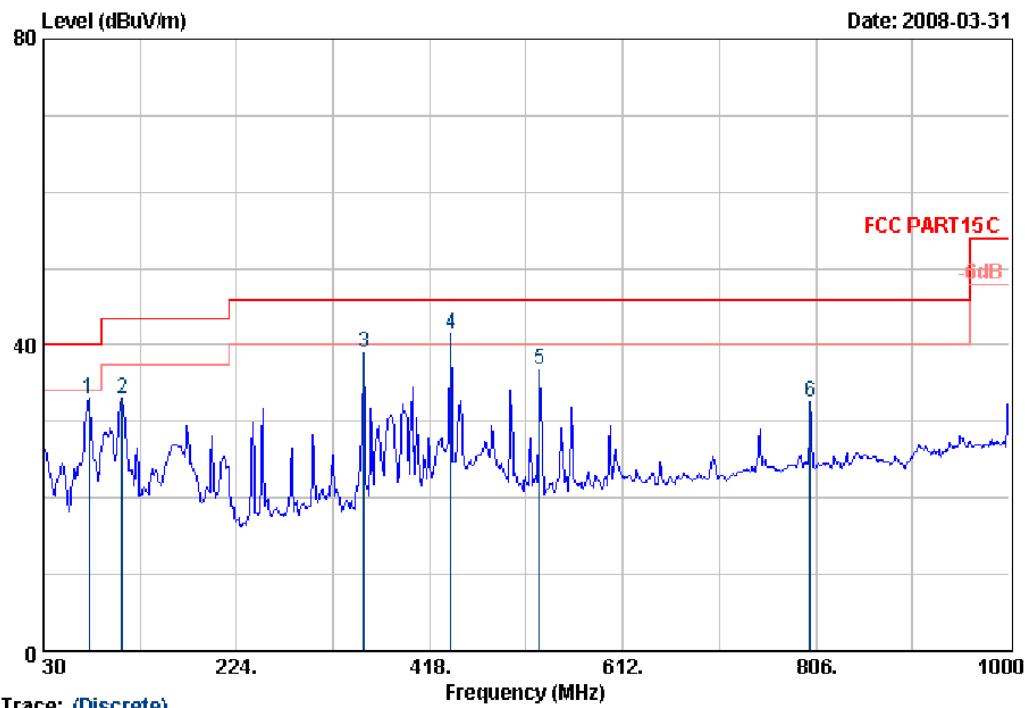
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.



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Postcode:518057

Data: 3 File: D:\2008 Report Data\TP-LINK\ACS8Q343.EMI (8)

Date: 2008-03-31



## Trace: (Discrete)

Site no. : 3# Chamber Radiation      Data no. : 3  
 Dis. / Ant. : 3m 2598      Ant. pol. : VERTICAL  
 Limit : FCC PART15 C  
 Env. / Ins. : 24°C/56% ESWS20      Engineer : Mario  
 EUT : Wireless N Router  
 Power Rating : DC 12V From Adapter AC 120V/60Hz  
 Test Mode : Tx Mode  
 M/N : TL-WR841ND

| Freq.<br>(MHz) | Ant.             |              | Cable             | Emission          |                    |                |        |
|----------------|------------------|--------------|-------------------|-------------------|--------------------|----------------|--------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 75.59        | 7.32             | 0.94         | 24.79             | 33.05             | 40.00              | 6.95           | QP     |
| 2 109.54       | 11.30            | 1.04         | 20.62             | 32.96             | 43.50              | 10.54          | QP     |
| 3 352.04       | 15.28            | 1.79         | 21.95             | 39.02             | 46.00              | 6.98           | QP     |
| 4 439.34       | 17.08            | 2.04         | 22.26             | 41.38             | 46.00              | 4.62           | QP     |
| 5 528.58       | 18.40            | 2.09         | 16.20             | 36.69             | 46.00              | 9.31           | QP     |
| 6 800.18       | 21.80            | 2.61         | 8.23              | 32.64             | 46.00              | 13.36          | QP     |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~4GHz

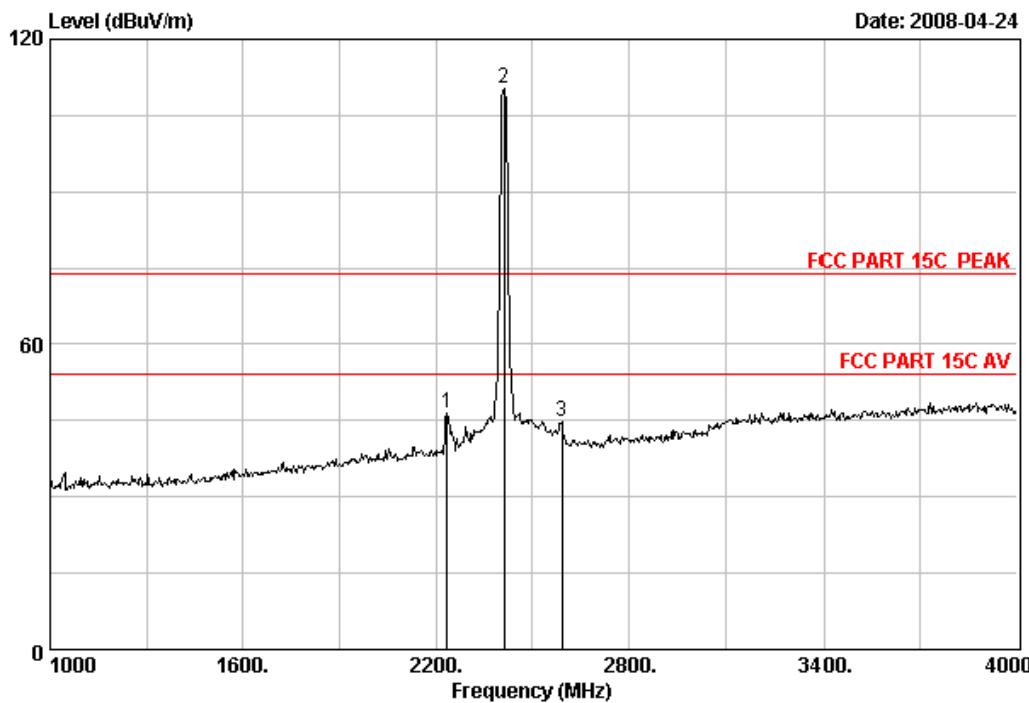


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Data: 97

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 97  
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                    |      | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|--------------------|------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dBuV/m) |      |        |
| <hr/>          |                |                         |                       |                 |                 |                    |                    |      |        |
| 1 2233.00      | 28.62          | 6.53                    | 35.23                 | 46.67           | 46.59           | 74.00              | 27.41              | Peak |        |
| 2 2412.00      | 29.03          | 6.73                    | 35.18                 | 109.74          | 110.32          | 74.00              | -36.32             | Peak |        |
| 3 2590.00      | 29.58          | 7.03                    | 35.12                 | 43.36           | 44.85           | 74.00              | 29.15              | Peak |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

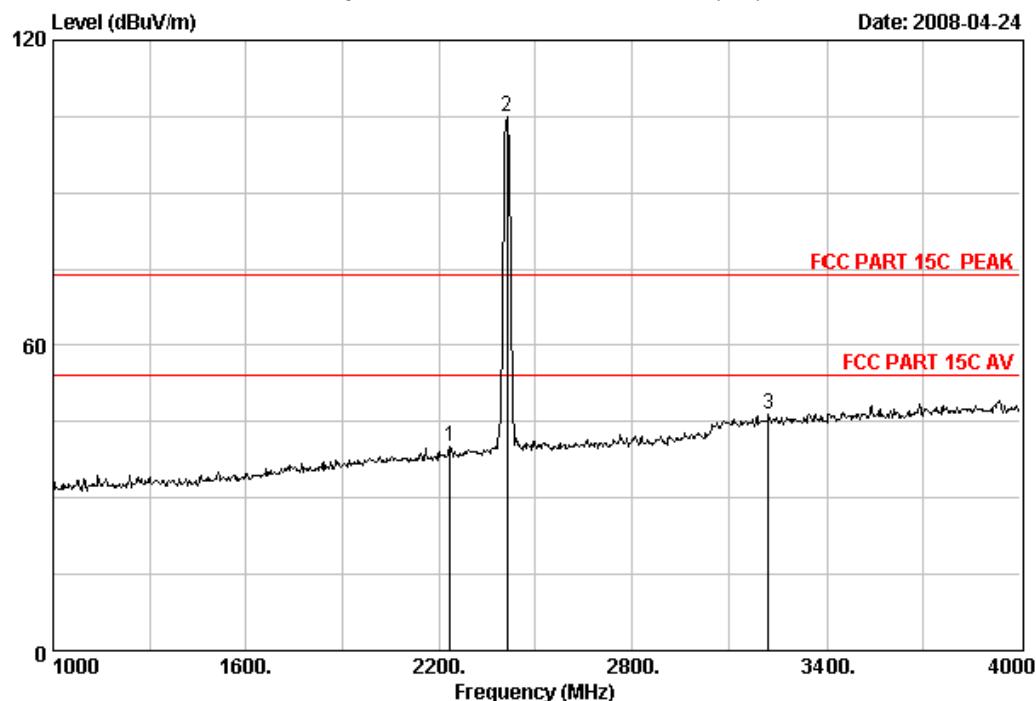


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Data: 98

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH1:2412MHz Tx

Data no. : 98  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |          |          |        | Remark |
|----------------|----------------|---------------|---------------|----------|----------|----------|--------|--------|
|                |                |               |               | Reading  | Level    | Limits   | Margin |        |
|                |                |               |               | (dBuV)   | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1 2233.00      | 28.62          | 6.53          | 35.23         | 40.23    | 40.15    | 74.00    | 33.85  | Peak   |
| 2 2412.00      | 29.03          | 6.73          | 35.18         | 104.23   | 104.81   | 74.00    | -30.81 | Peak   |
| 3 3223.00      | 31.61          | 8.13          | 34.93         | 41.61    | 46.42    | 74.00    | 27.58  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

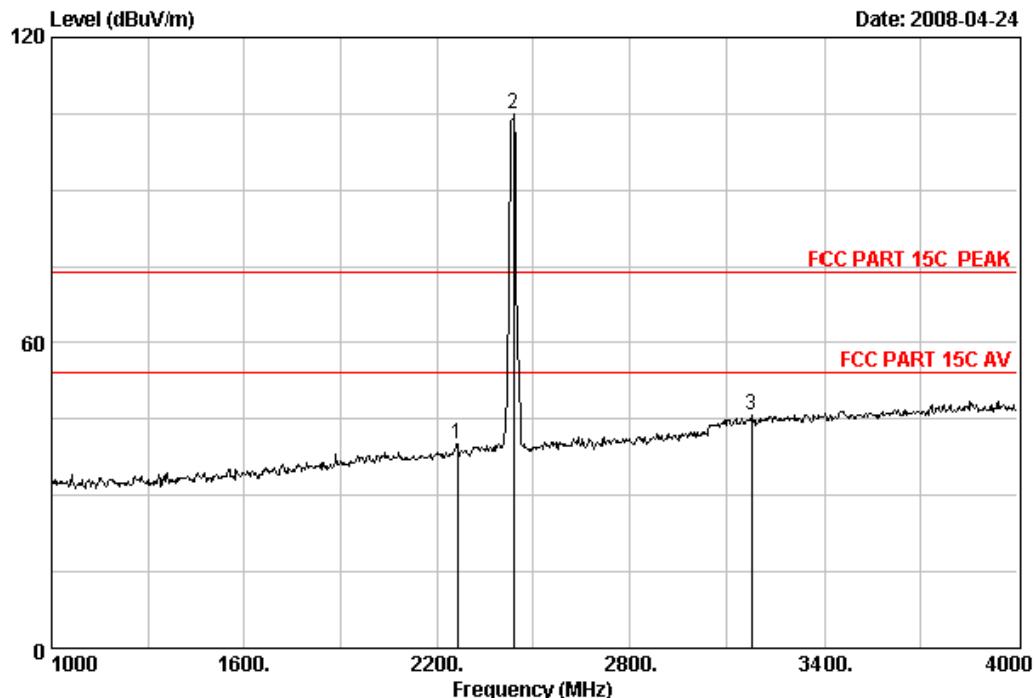


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Data: 99

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 99  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Router M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH6:2437MHz Tx

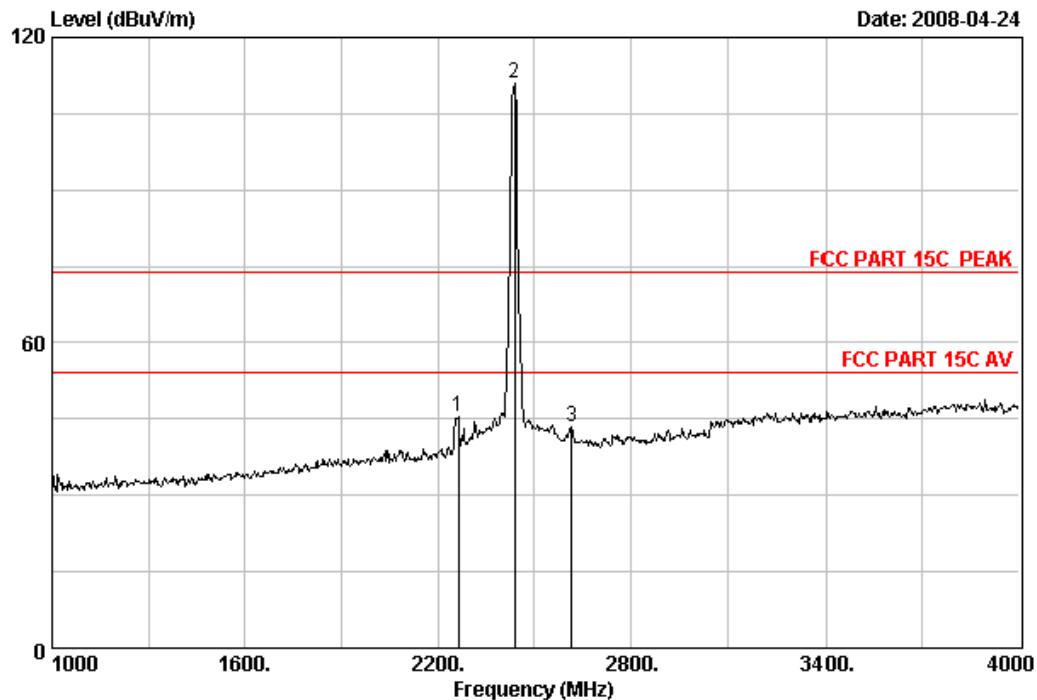
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2263.00      | 28.67                    | 6.58                  | 35.22                 | 40.05             | 40.08             | 74.00              | 33.92          | Peak   |
| 2 2437.00      | 29.11                    | 6.80                  | 35.17                 | 104.32            | 105.06            | 74.00              | -31.06         | Peak   |
| 3 3178.00      | 31.47                    | 8.03                  | 34.95                 | 41.39             | 45.94             | 74.00              | 28.06          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 100 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)



Site no. : RF Chamber Data no. : 100  
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 2263.00      | 28.67                    | 6.58                  | 35.22                 | 45.37             | 45.40             | 74.00              | 28.60          | Peak   |
| 2 2437.00      | 29.11                    | 6.80                  | 35.17                 | 110.17            | 110.91            | 74.00              | -36.91         | Peak   |
| 3 2614.00      | 29.64                    | 7.06                  | 35.11                 | 41.93             | 43.52             | 74.00              | 30.48          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

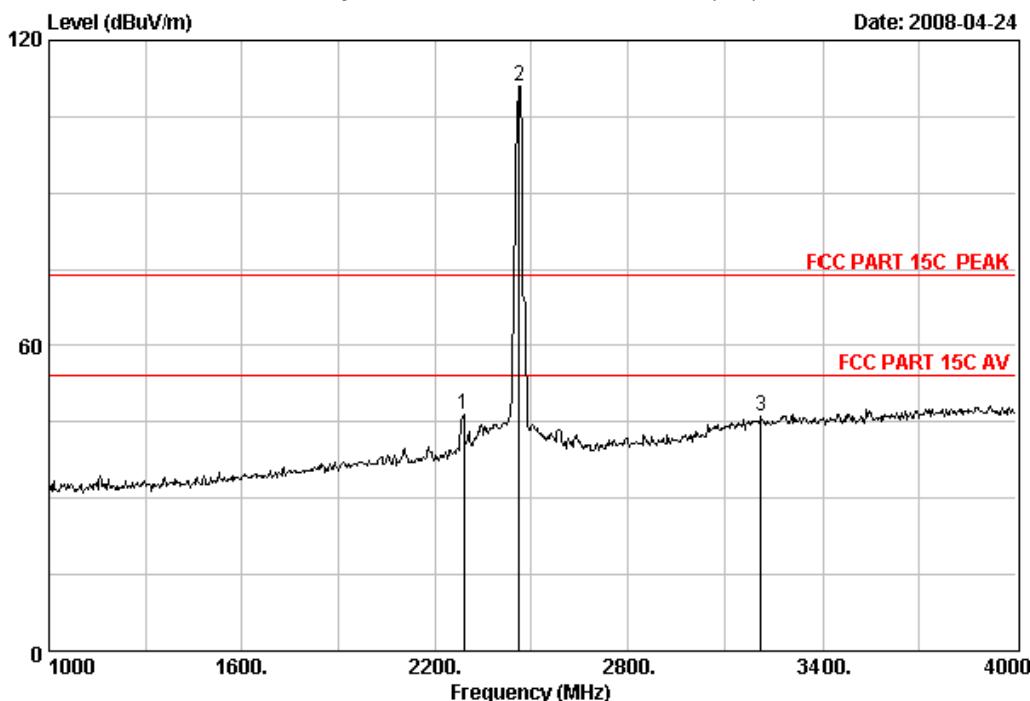


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Postcode:518057

Data: 101

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 101  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2290.00      | 28.75                    | 6.61                  | 35.21                 | 46.18             | 46.33             | 74.00              | 27.67          | Peak   |
| 2 2462.00      | 29.15                    | 6.84                  | 35.17                 | 110.01            | 110.83            | 74.00              | -36.83         | Peak   |
| 3 3214.00      | 31.57                    | 8.13                  | 34.93                 | 41.38             | 46.15             | 74.00              | 27.85          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

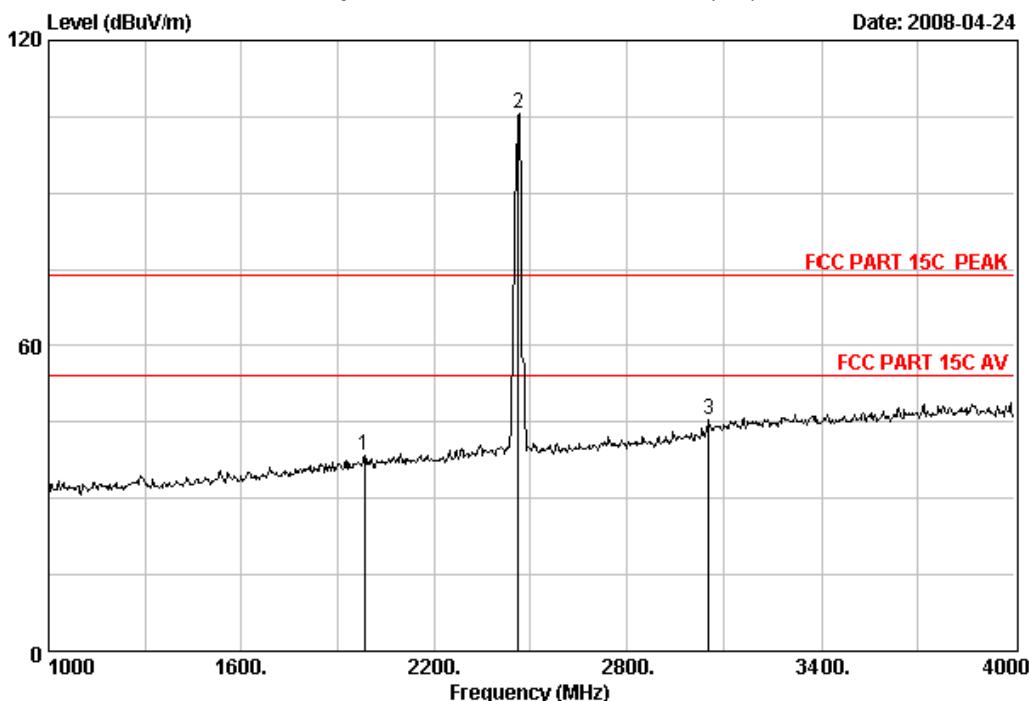


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Postcode:518057

Data: 102

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 102  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1984.00      | 27.97                    | 6.16                  | 35.32                 | 39.70             | 38.51             | 74.00              | 35.49          | Peak   |
| 2 2462.00      | 29.15                    | 6.84                  | 35.17                 | 104.81            | 105.63            | 74.00              | -31.63         | Peak   |
| 3 3055.00      | 31.14                    | 7.78                  | 34.99                 | 41.60             | 45.53             | 74.00              | 28.47          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

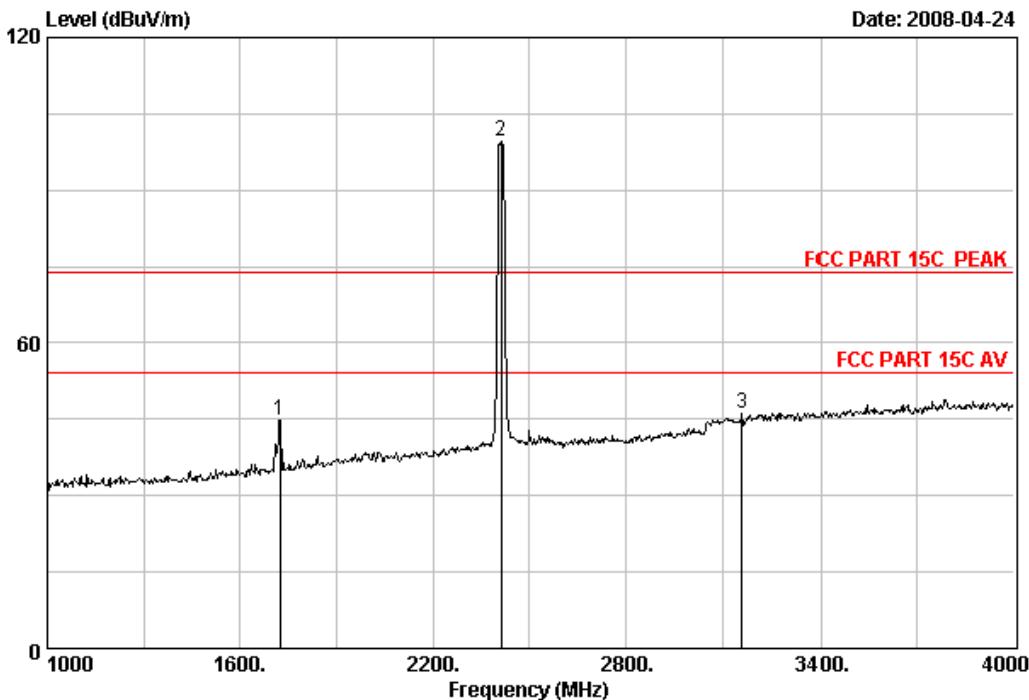


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Postcode:518057

Data: 103

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 103  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1723.00      | 26.63                    | 5.67                  | 35.55                 | 48.02             | 44.77             | 74.00              | 29.23          | Peak   |
| 2 2412.00      | 29.03                    | 6.73                  | 35.18                 | 99.07             | 99.65             | 74.00              | -25.65         | Peak   |
| 3 3160.00      | 31.43                    | 7.99                  | 34.96                 | 41.62             | 46.08             | 74.00              | 27.92          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

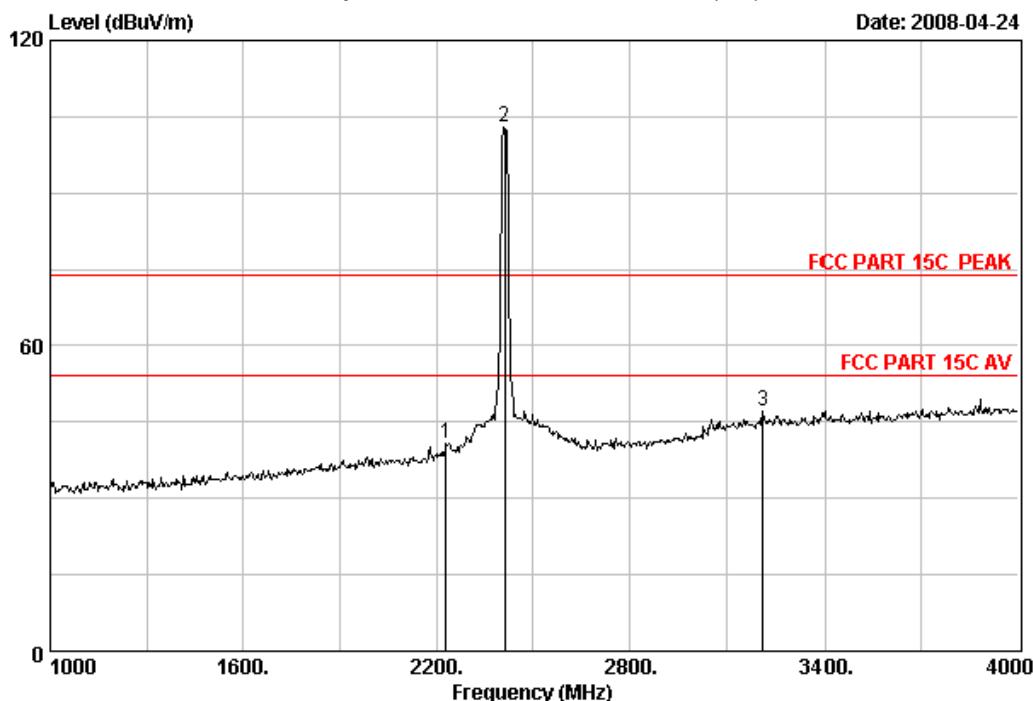


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Data: 104

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 104  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|----------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 2230.00      | 28.58          | 6.53                  | 35.23                 | 41.05             | 40.93             | 74.00              | 33.07          | Peak   |
| 2 2412.00      | 29.03          | 6.73                  | 35.18                 | 102.40            | 102.98            | 74.00              | -28.98         | Peak   |
| 3 3214.00      | 31.57          | 8.13                  | 34.93                 | 42.22             | 46.99             | 74.00              | 27.01          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

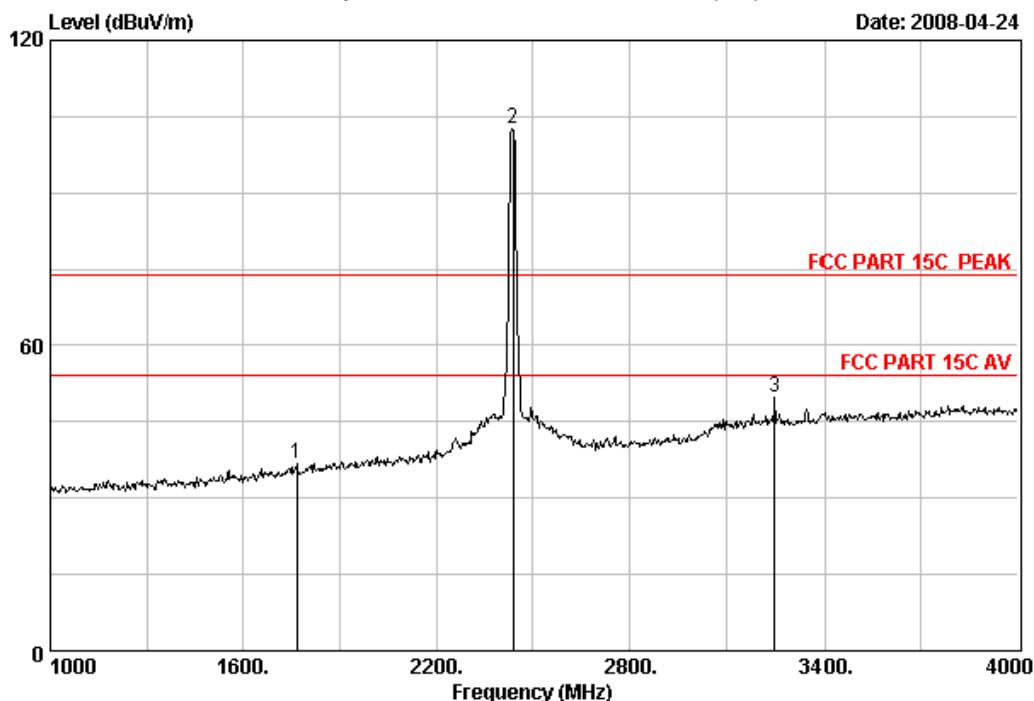


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Data: 105

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 105  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1765.00      | 26.80                    | 5.74                  | 35.50                 | 39.76             | 36.80             | 74.00              | 37.20          | Peak   |
| 2 2437.00      | 29.11                    | 6.80                  | 35.17                 | 101.72            | 102.46            | 74.00              | -28.46         | Peak   |
| 3 3250.00      | 31.66                    | 8.23                  | 34.92                 | 44.73             | 49.70             | 74.00              | 24.30          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

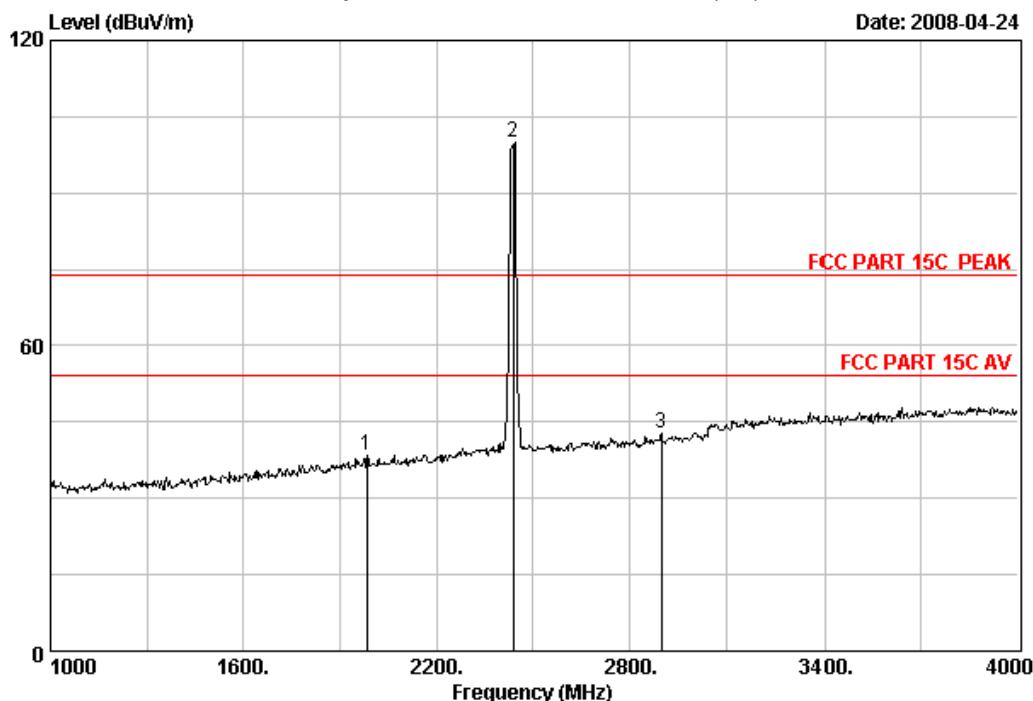


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Data: 106

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 106  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 1984.00      | 27.97                    | 6.16                  | 35.32                 | 39.56             | 38.37             | 74.00              | 35.63          | Peak   |
| 2 2437.00      | 29.11                    | 6.80                  | 35.17                 | 99.24             | 99.98             | 74.00              | -25.98         | Peak   |
| 3 2899.00      | 30.65                    | 7.48                  | 35.03                 | 39.62             | 42.72             | 74.00              | 31.28          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

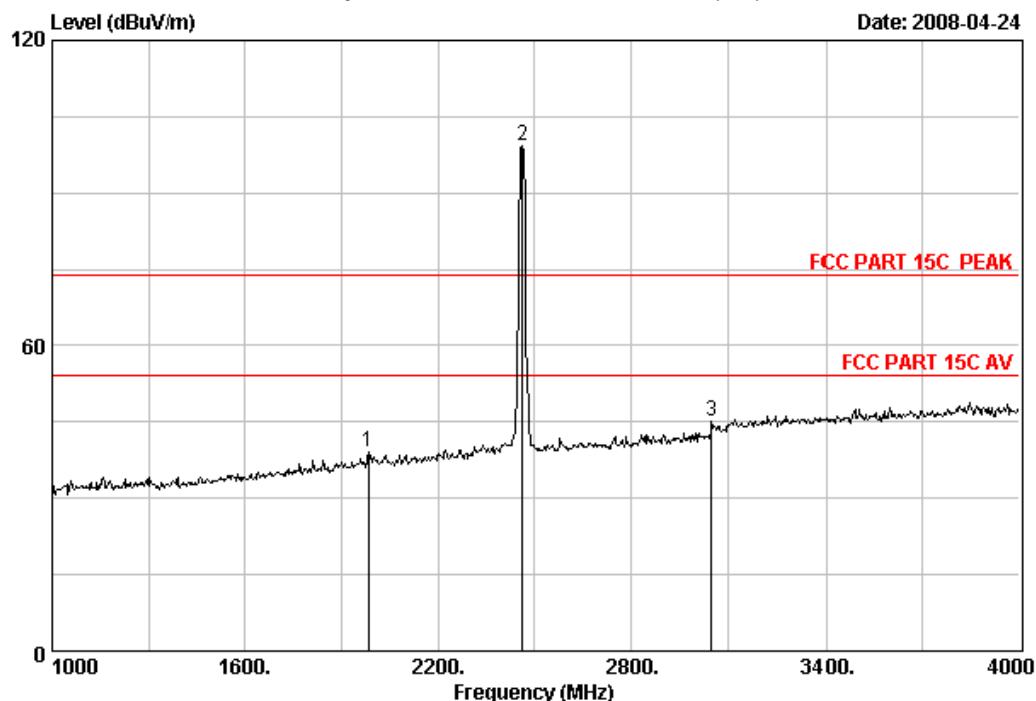


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Data: 107

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 107  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH11:2462MHz Tx

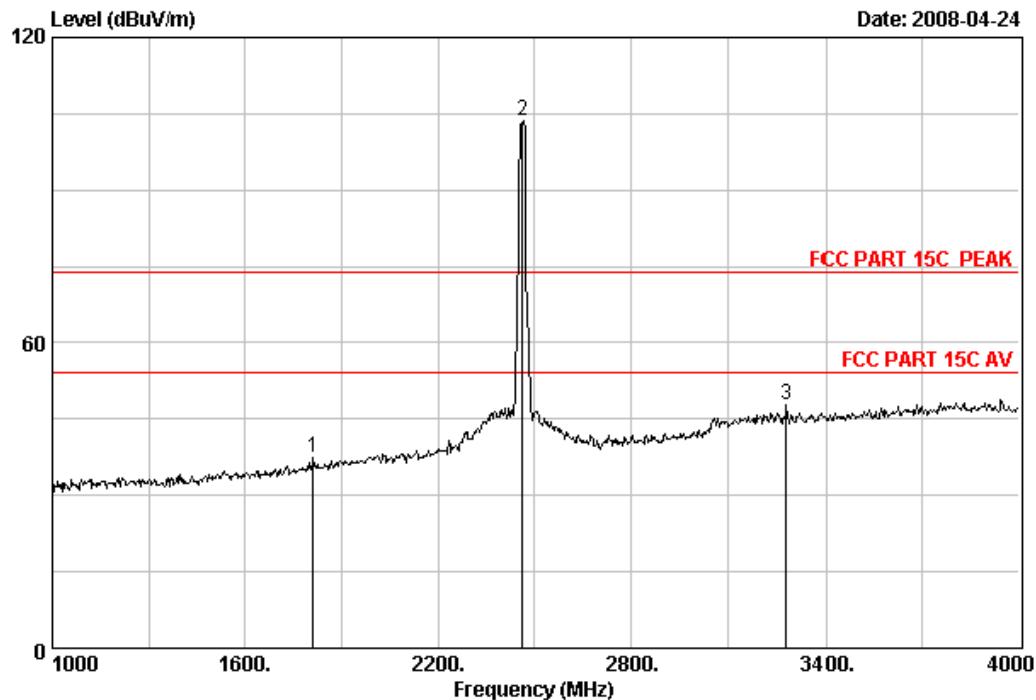
| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |          |          |        |        |
|----------------|----------------|---------------|---------------|----------|----------|----------|--------|--------|
|                |                |               |               | Reading  | Level    | Limits   | Margin | Remark |
|                |                |               |               | (dBuV)   | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1 1984.00      | 27.97          | 6.16          | 35.32         | 40.22    | 39.03    | 74.00    | 34.97  | Peak   |
| 2 2462.00      | 29.15          | 6.84          | 35.17         | 98.46    | 99.28    | 74.00    | -25.28 | Peak   |
| 3 3049.00      | 31.14          | 7.78          | 34.99         | 41.11    | 45.04    | 74.00    | 28.96  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 108 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)



Site no. : RF Chamber Data no. : 108  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH11:2462MHz Tx

|       | Ant.    | Cable | Amp    | Emission |          |          |        |             |
|-------|---------|-------|--------|----------|----------|----------|--------|-------------|
| Freq. | Factor  | Loss  | Factor | Reading  | Level    | Limits   | Margin | Remark      |
| (MHz) | (dB/m)  | (dB)  | (dB)   | (dBuV)   | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1     | 1810.00 | 27.07 | 5.84   | 35.48    | 39.93    | 37.36    | 74.00  | 36.64 Peak  |
| 2     | 2462.00 | 29.15 | 6.84   | 35.17    | 102.86   | 103.68   | 74.00  | -29.68 Peak |
| 3     | 3283.00 | 31.76 | 8.28   | 34.92    | 42.67    | 47.79    | 74.00  | 26.21 Peak  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

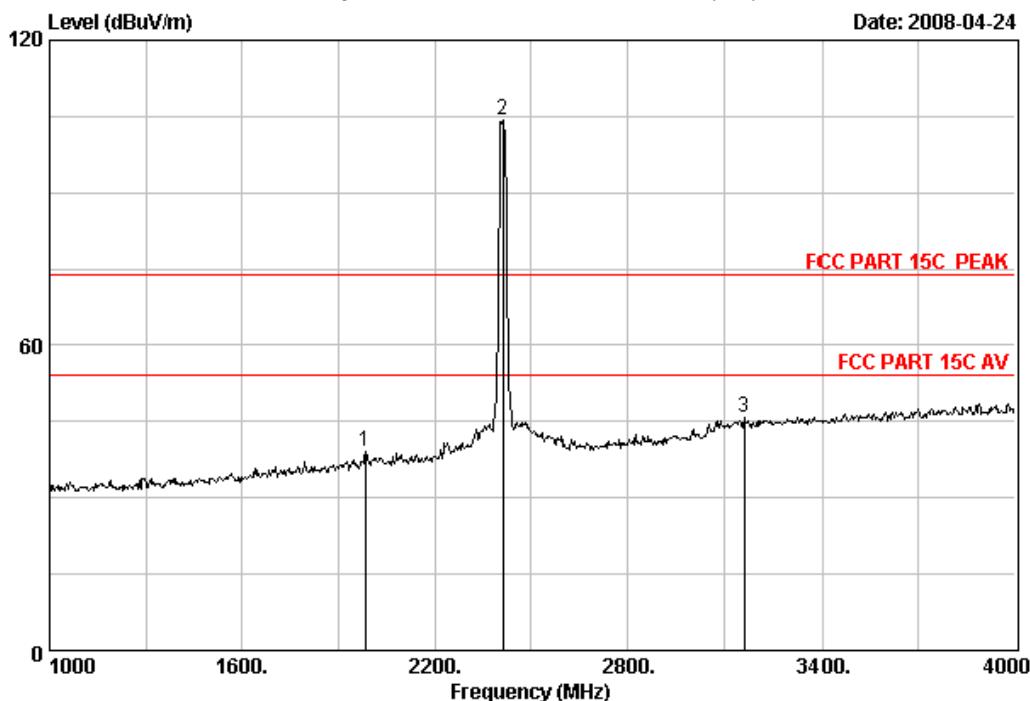


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Data: 109

File: D:\2008 report data\TTP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 109  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT20 CH1:2412MHz Tx

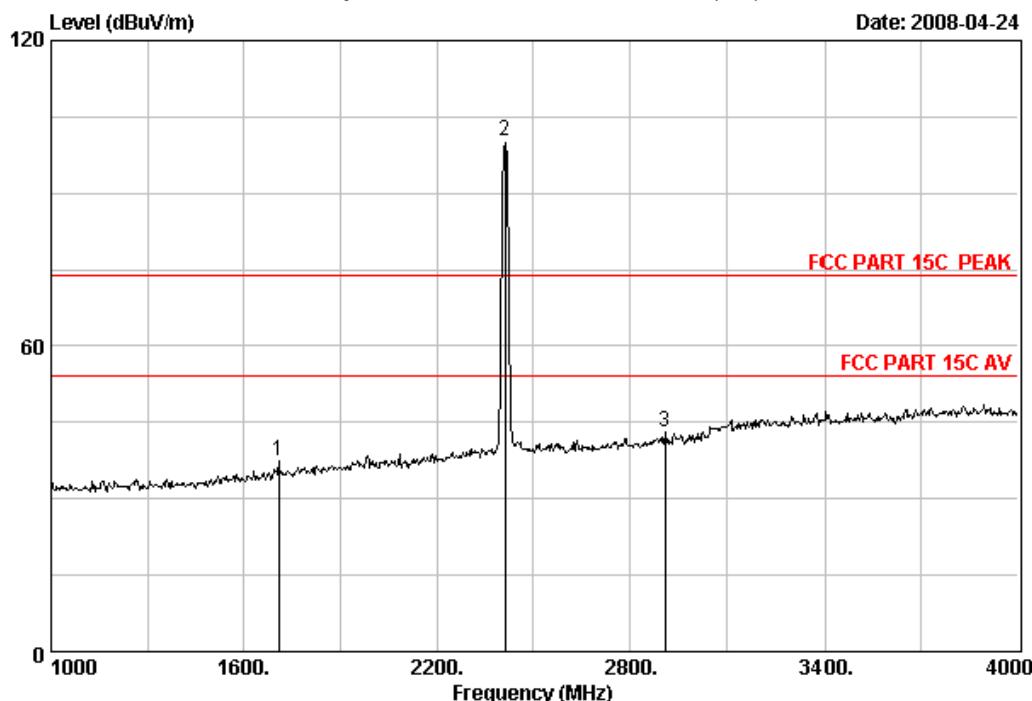
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1984.00      | 27.97                    | 6.16                  | 35.32                 | 40.27             | 39.08             | 74.00              | 34.92          | Peak   |
| 2 2412.00      | 29.03                    | 6.73                  | 35.18                 | 103.56            | 104.14            | 74.00              | -30.14         | Peak   |
| 3 3163.00      | 31.43                    | 7.99                  | 34.95                 | 41.33             | 45.80             | 74.00              | 28.20          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 110 File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (120)



Site no. : RF Chamber Data no. : 110  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT20 CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|----------------|-------------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1708.00      | 26.54          | 5.64                    | 35.57                 | 40.70             | 37.31             | 74.00              | 36.69          | Peak   |
| 2 2412.00      | 29.03          | 6.73                    | 35.18                 | 99.56             | 100.14            | 74.00              | -26.14         | Peak   |
| 3 2908.00      | 30.65          | 7.53                    | 35.03                 | 39.84             | 42.99             | 74.00              | 31.01          | Peak   |

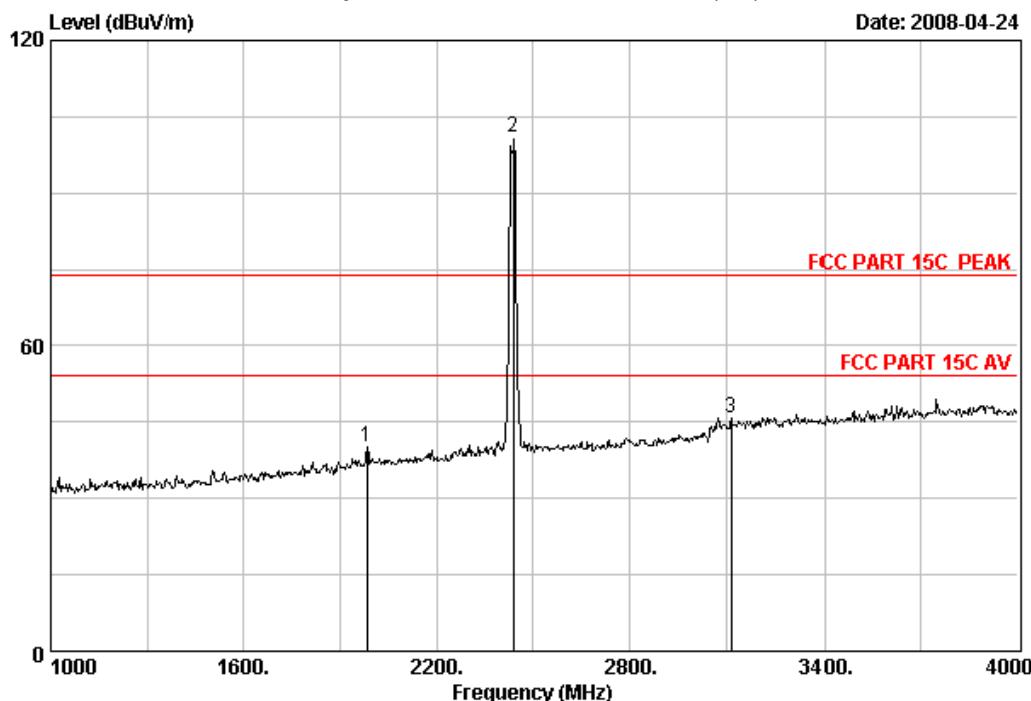
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 111 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 111  
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n HT20 CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1984.00      | 27.97                    | 6.16                  | 35.32                 | 41.30             | 40.11             | 74.00              | 33.89          | Peak   |
| 2 2437.00      | 29.11                    | 6.80                  | 35.17                 | 100.20            | 100.94            | 74.00              | -26.94         | Peak   |
| 3 3115.00      | 31.28                    | 7.90                  | 34.96                 | 41.66             | 45.88             | 74.00              | 28.12          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

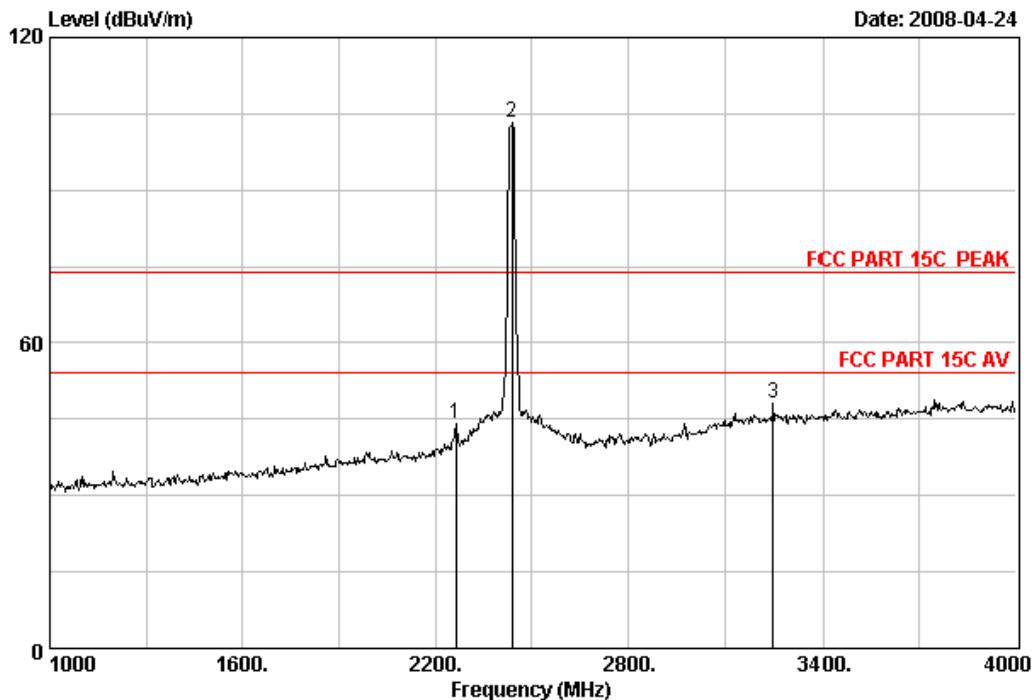


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Data: 112

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 112  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Router M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT20 CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2263.00      | 28.67                    | 6.58                  | 35.22                 | 43.98             | 44.01             | 74.00              | 29.99          | Peak   |
| 2 2437.00      | 29.11                    | 6.80                  | 35.17                 | 102.49            | 103.23            | 74.00              | -29.23         | Peak   |
| 3 3250.00      | 31.66                    | 8.23                  | 34.92                 | 43.30             | 48.27             | 74.00              | 25.73          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

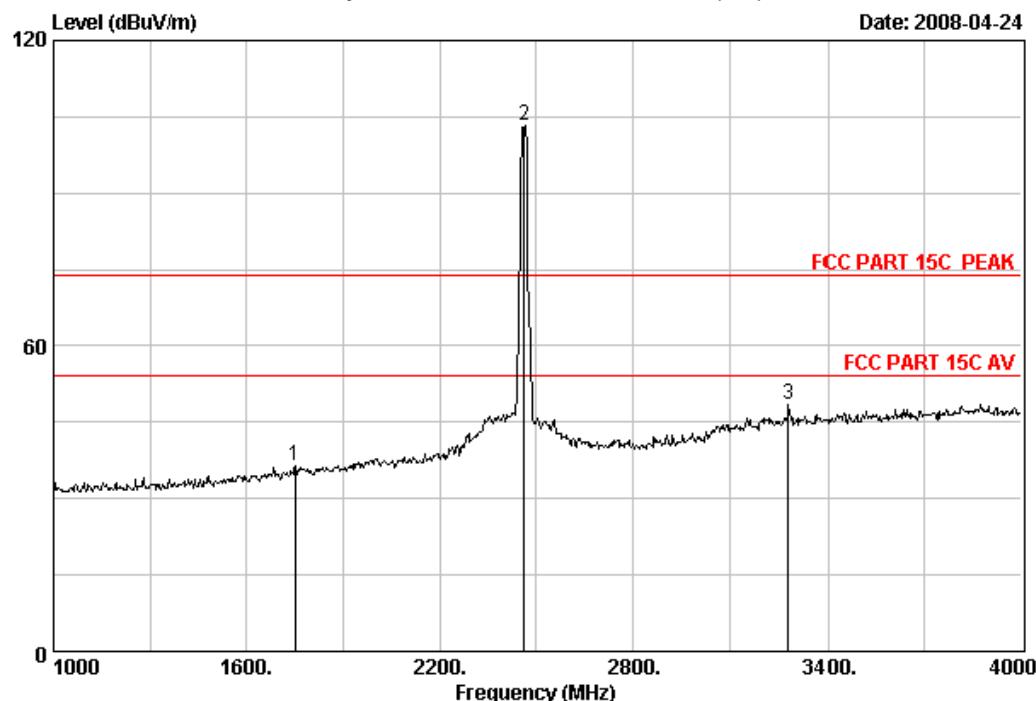


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Data: 113

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 113  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT20 CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1750.00      | 26.72                    | 5.74                  | 35.53                 | 39.41             | 36.34             | 74.00              | 37.66          | Peak   |
| 2 2462.00      | 29.15                    | 6.84                  | 35.17                 | 102.40            | 103.22            | 74.00              | -29.22         | Peak   |
| 3 3283.00      | 31.76                    | 8.28                  | 34.92                 | 43.49             | 48.61             | 74.00              | 25.39          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

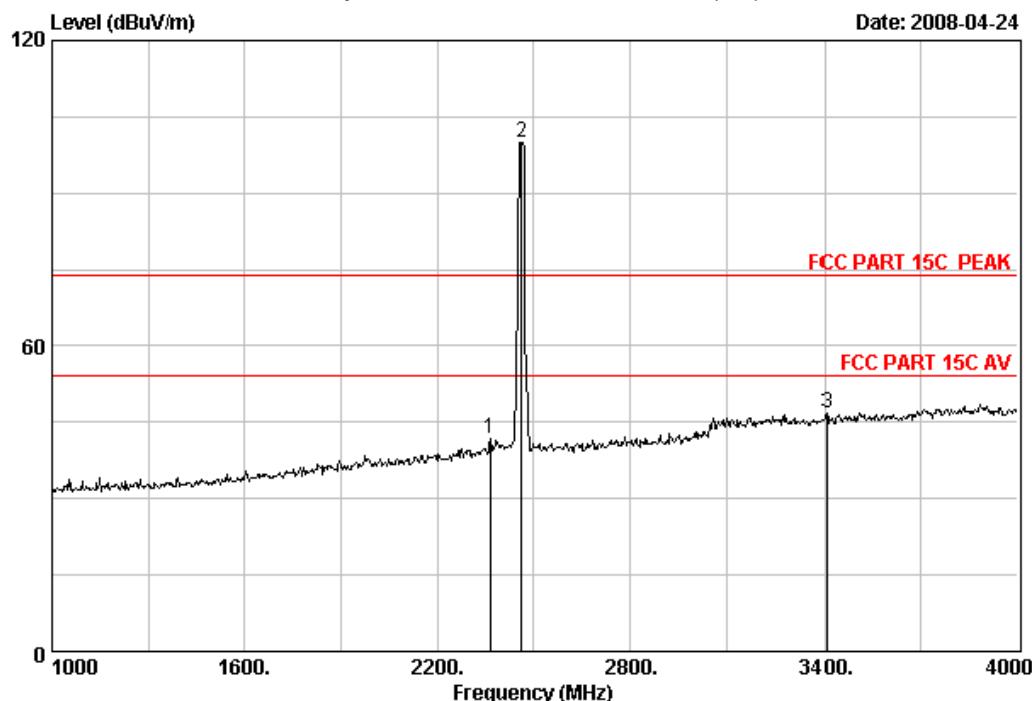


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Data: 114

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 114  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT20 CH11:2462MHz Tx

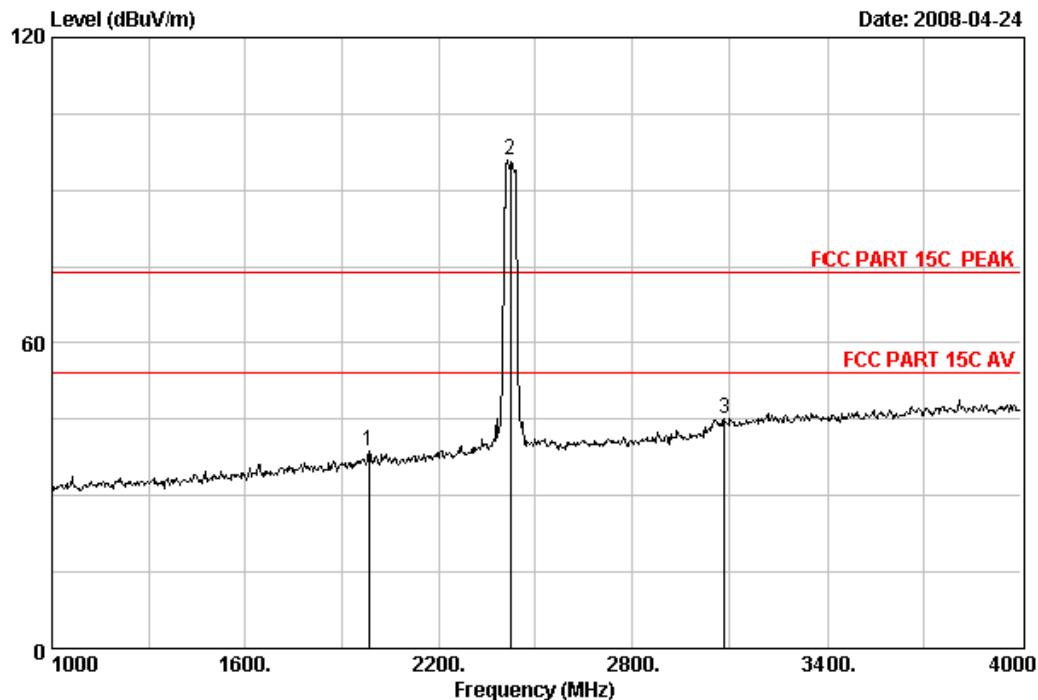
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 2365.00      | 28.91                    | 6.69                  | 35.19                 | 41.53             | 41.94             | 74.00              | 32.06          | Peak   |
| 2 2462.00      | 29.15                    | 6.84                  | 35.17                 | 99.14             | 99.96             | 74.00              | -25.96         | Peak   |
| 3 3409.00      | 32.13                    | 8.51                  | 34.88                 | 41.05             | 46.81             | 74.00              | 27.19          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 115 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)



Site no. : RF Chamber Data no. : 115  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT40 CH1:2422MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1984.00      | 27.97                    | 6.16                  | 35.32                 | 40.03             | 38.84             | 74.00              | 35.16          | Peak   |
| 2 2422.00      | 29.07                    | 6.77                  | 35.17                 | 95.19             | 95.86             | 74.00              | -21.86         | Peak   |
| 3 3085.00      | 31.24                    | 7.83                  | 34.98                 | 41.14             | 45.23             | 74.00              | 28.77          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

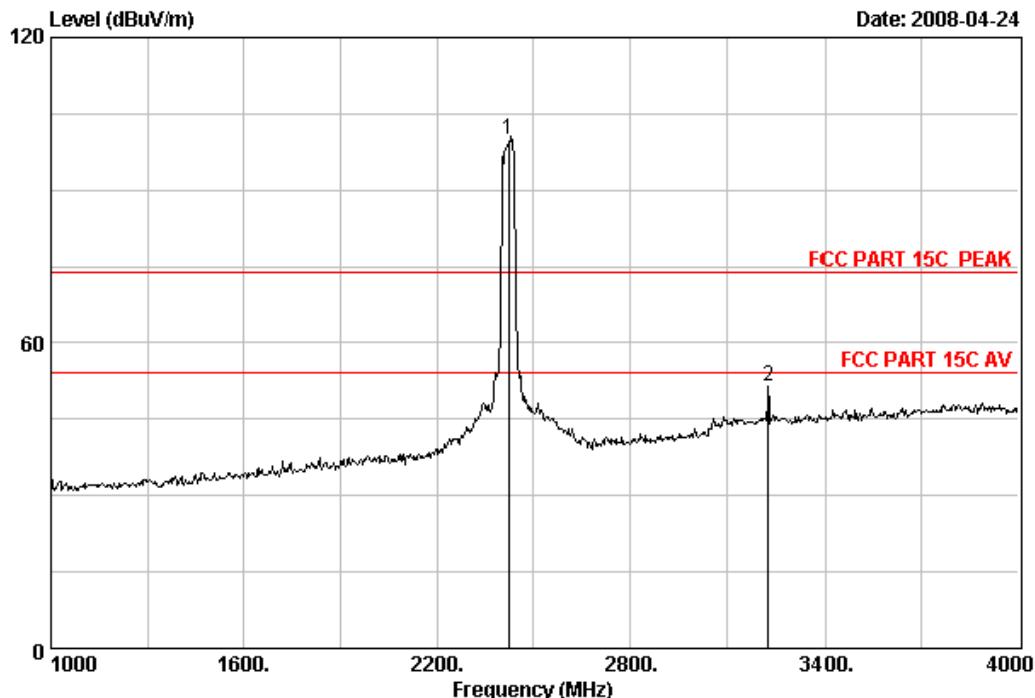


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Postcode:518057

Data: 116

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 116  
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n HT40 CH1:2422MHz Tx

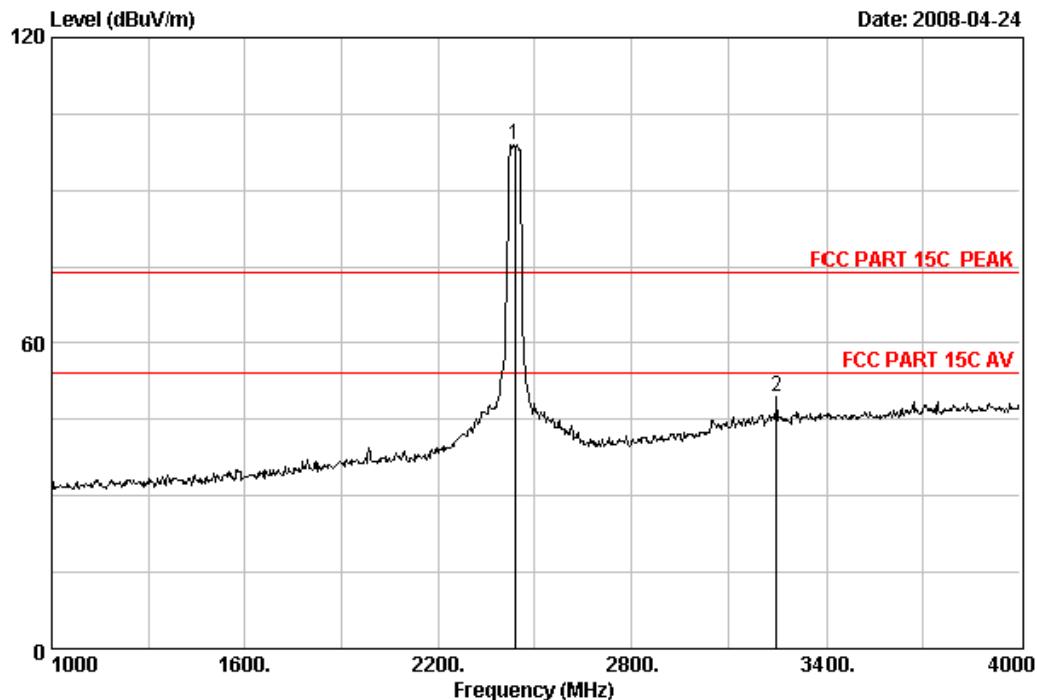
| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |          |          |        |             |
|----------------|----------------|---------------|---------------|----------|----------|----------|--------|-------------|
|                |                |               |               | Reading  | Level    | Limits   | Margin | Remark      |
|                |                |               |               | (dBuV)   | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1              | 2422.00        | 29.07         | 6.77          | 35.17    | 99.14    | 99.81    | 74.00  | -25.81 Peak |
| 2              | 3229.00        | 31.61         | 8.18          | 34.93    | 46.74    | 51.60    | 74.00  | 22.40 Peak  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 117 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)



Site no. : RF Chamber Data no. : 117  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT40 CH4:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2437.00      | 29.11                    | 6.80                  | 35.17                 | 98.32             | 99.06             | 74.00              | -25.06         | Peak   |
| 2 3250.00      | 31.66                    | 8.23                  | 34.92                 | 44.51             | 49.48             | 74.00              | 24.52          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

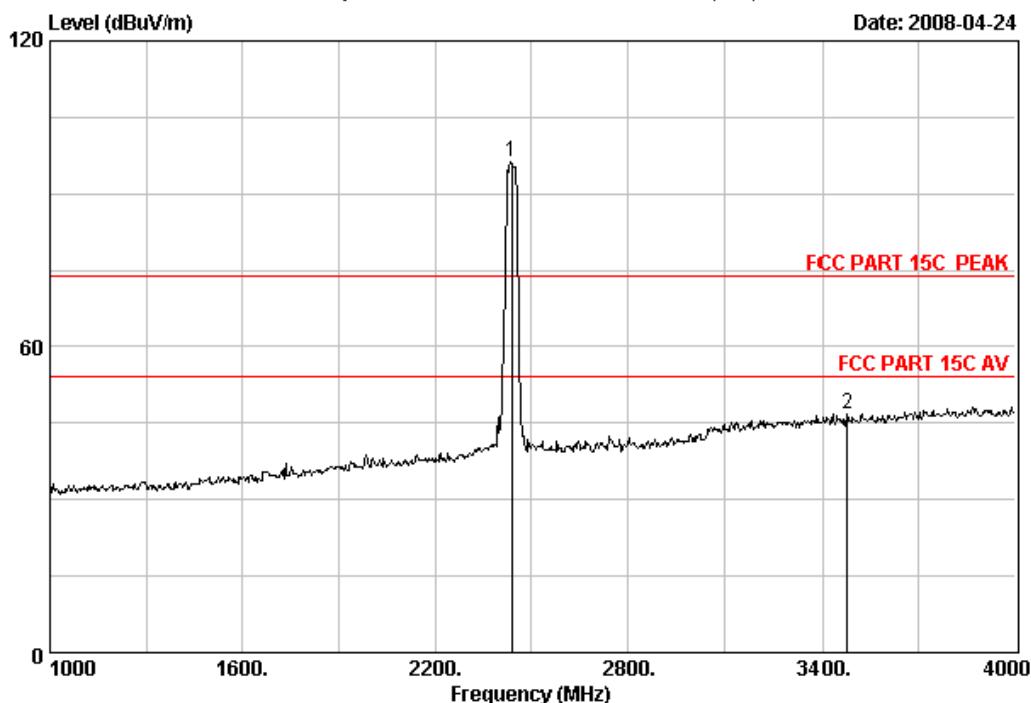


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Data: 118

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 118  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT40 CH4:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2437.00      | 29.11                    | 6.80                  | 35.17                 | 95.40             | 96.14             | 74.00              | -22.14         | Peak   |
| 2 3478.00      | 32.32                    | 8.79                  | 34.86                 | 40.69             | 46.94             | 74.00              | 27.06          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

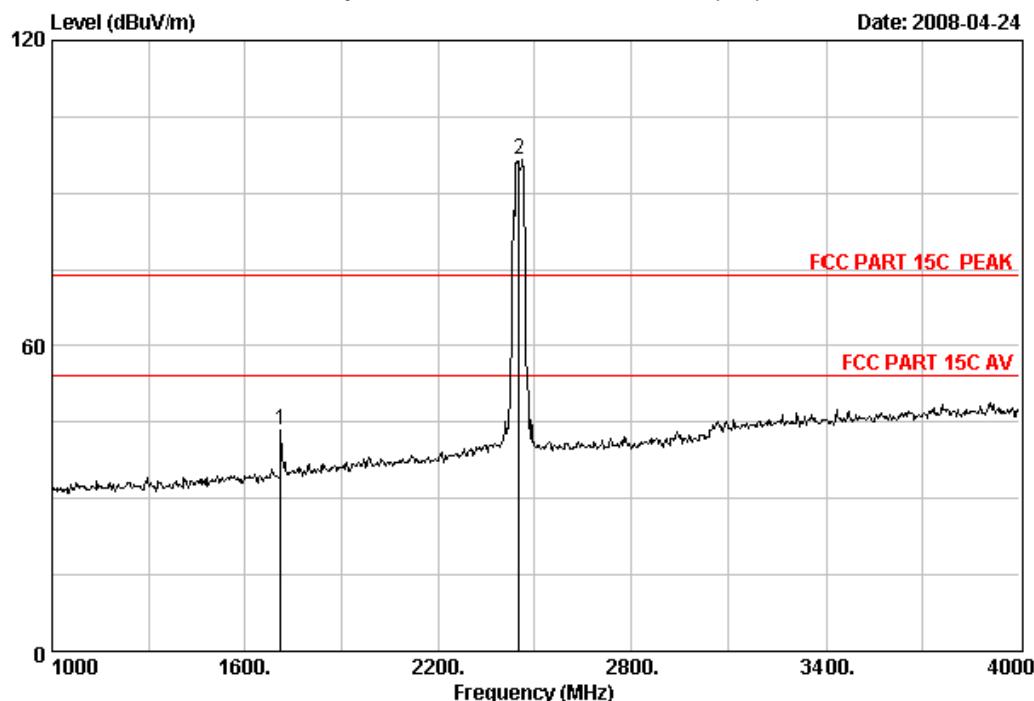


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Data: 119

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)

Date: 2008-04-24



Site no. : RF Chamber Data no. : 119  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT40 CH7:2452MHz Tx

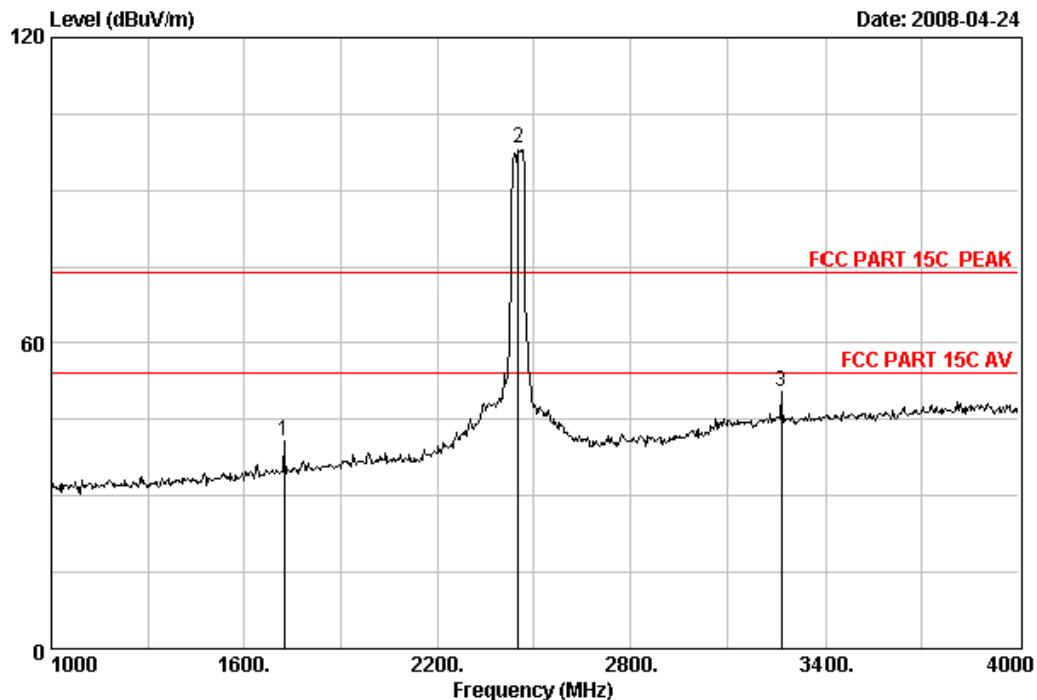
| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 1711.00      | 26.54          | 5.67                    | 35.57                 | 46.77           | 43.41           | 74.00              | 30.59          | Peak   |
| 2 2452.00      | 29.11          | 6.84                    | 35.17                 | 95.71           | 96.49           | 74.00              | -22.49         | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 120 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (120)



Site no. : RF Chamber Data no. : 120  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n HT40 CH7:2452MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 1723.00      | 26.63                    | 5.67                  | 35.55                 | 44.19             | 40.94             | 74.00              | 33.06          | Peak   |
| 2 2452.00      | 29.11                    | 6.84                  | 35.17                 | 97.60             | 98.38             | 74.00              | -24.38         | Peak   |
| 3 3268.00      | 31.71                    | 8.28                  | 34.92                 | 45.34             | 50.41             | 74.00              | 23.59          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 4GHz~18GHz

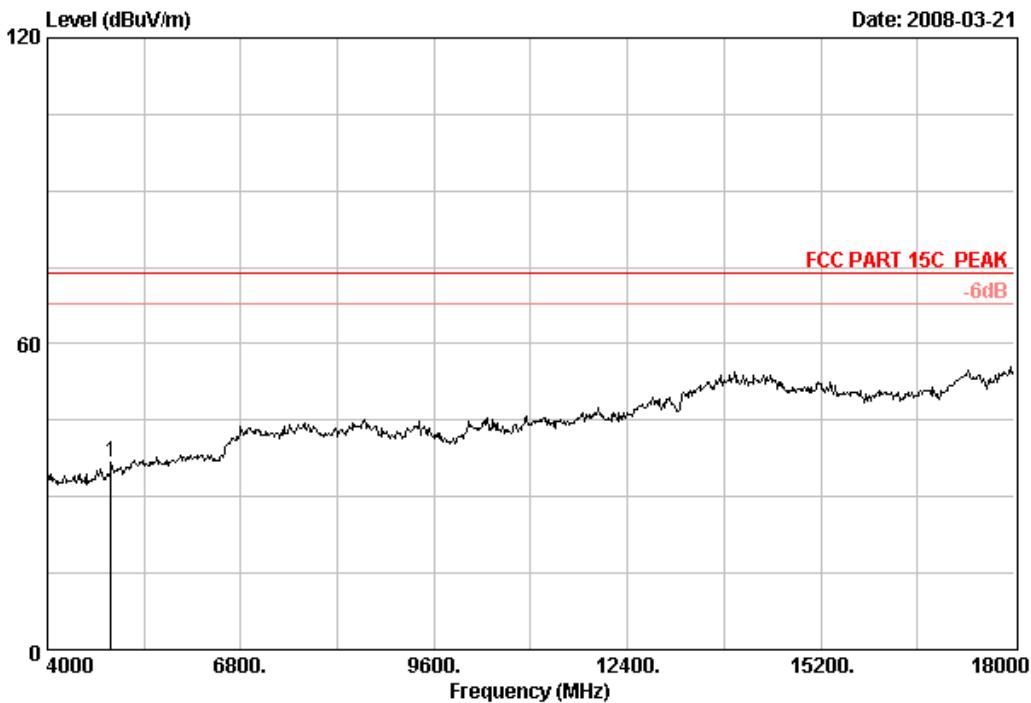


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Data: 127

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-21



Site no. : RF Chamber Data no. : 127  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                |        |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 4924.00      | 34.29          | 10.58                   | 34.47                 | 26.50           | 36.90           | 74.00              | 37.10          | Peak   |

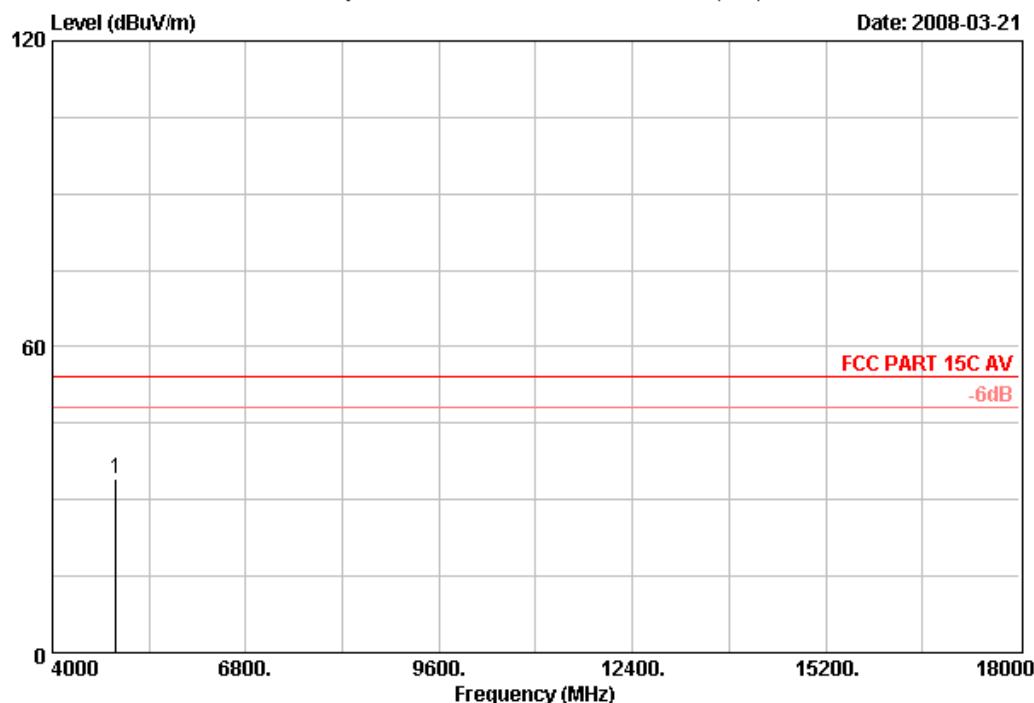
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 128

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 128  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4924.00      | 34.29          | 10.58         | 34.47         | 23.69    | 34.09 | 54.00  | 19.91  | Average |

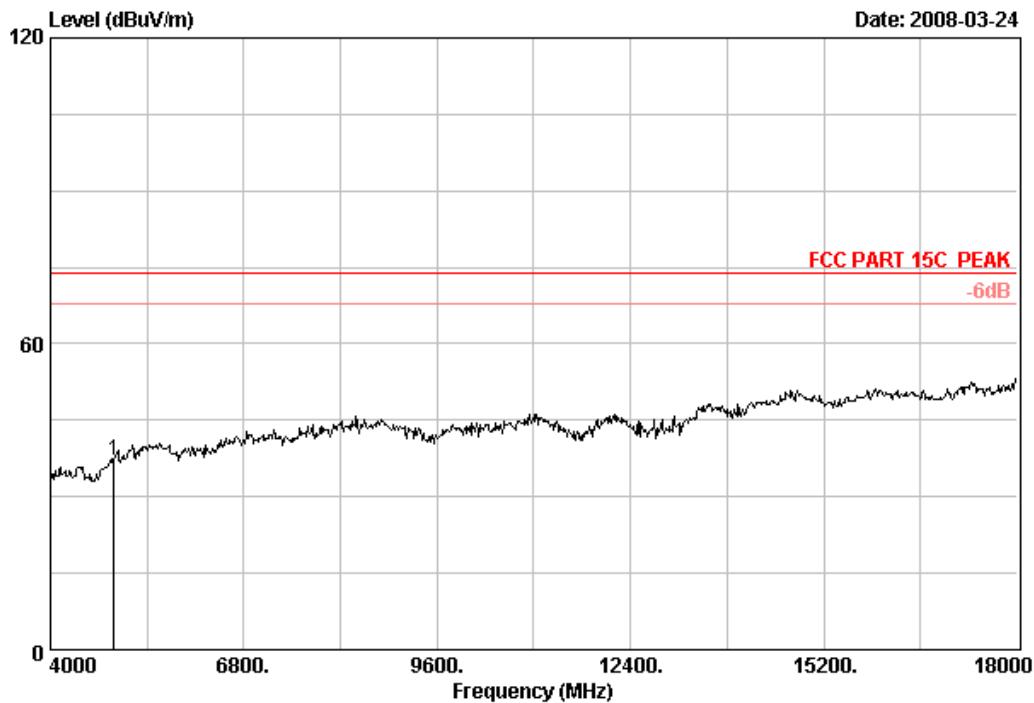
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 129

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 129  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|--------|
|                |                |               |               | Reading  | Level | Limits | Margin |        |
| 1 4924.00      | 34.29          | 10.58         | 34.47         | 26.69    | 37.09 | 74.00  | 36.91  | Peak   |

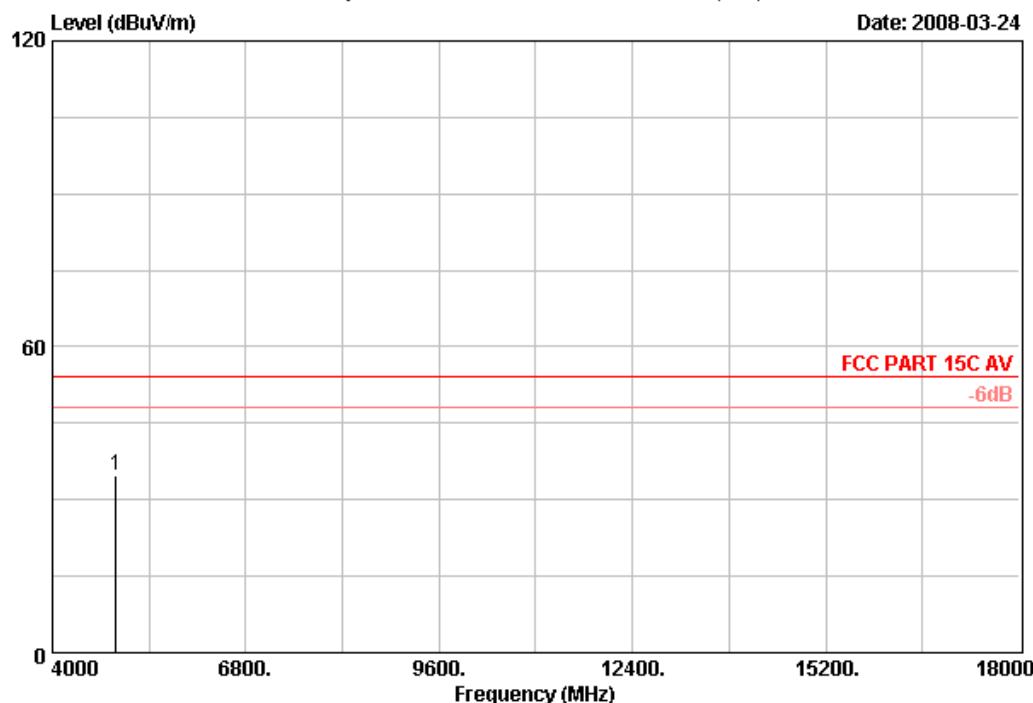
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 130

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 130  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4924.00      | 34.29          | 10.58         | 34.47         | 24.21    | 34.61 | 54.00  | 19.39  | Average |

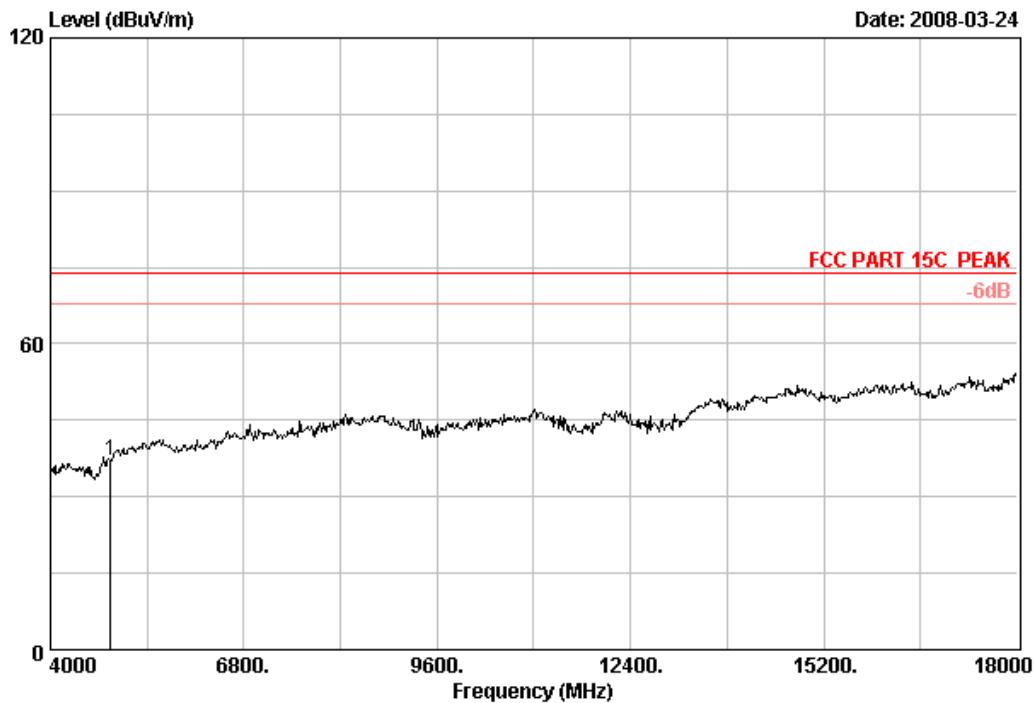
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 131

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 131  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4874.00      | 34.16          | 10.56                   | 34.48                 | 26.86             | 37.10             | 74.00              | 36.90          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

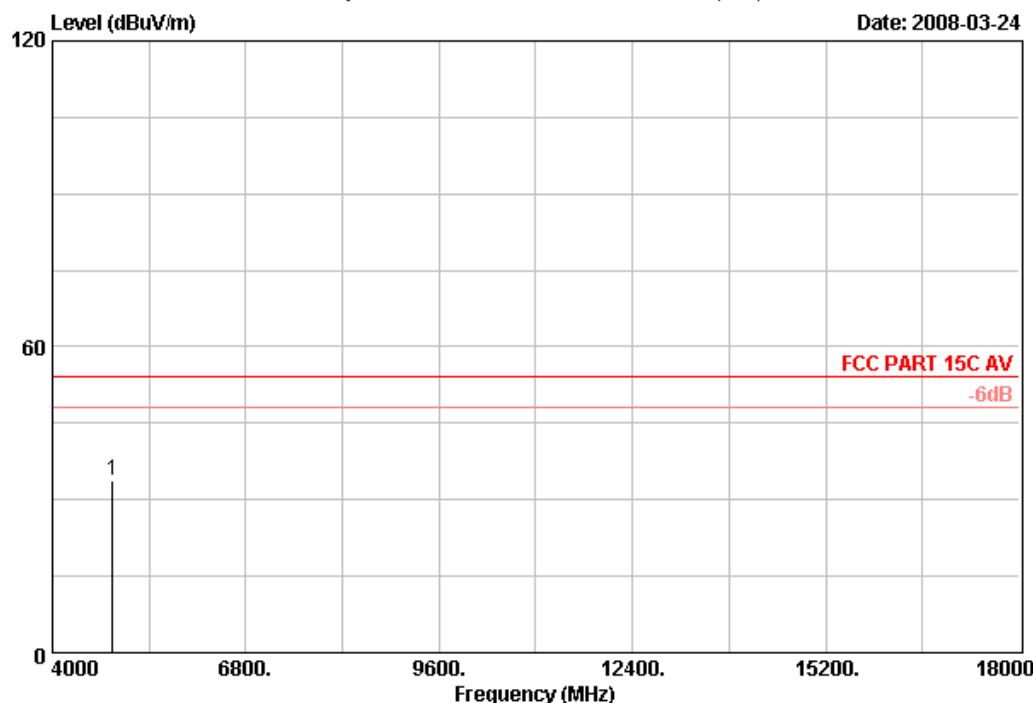


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Data: 132

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 132  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH6:2437MHz Tx

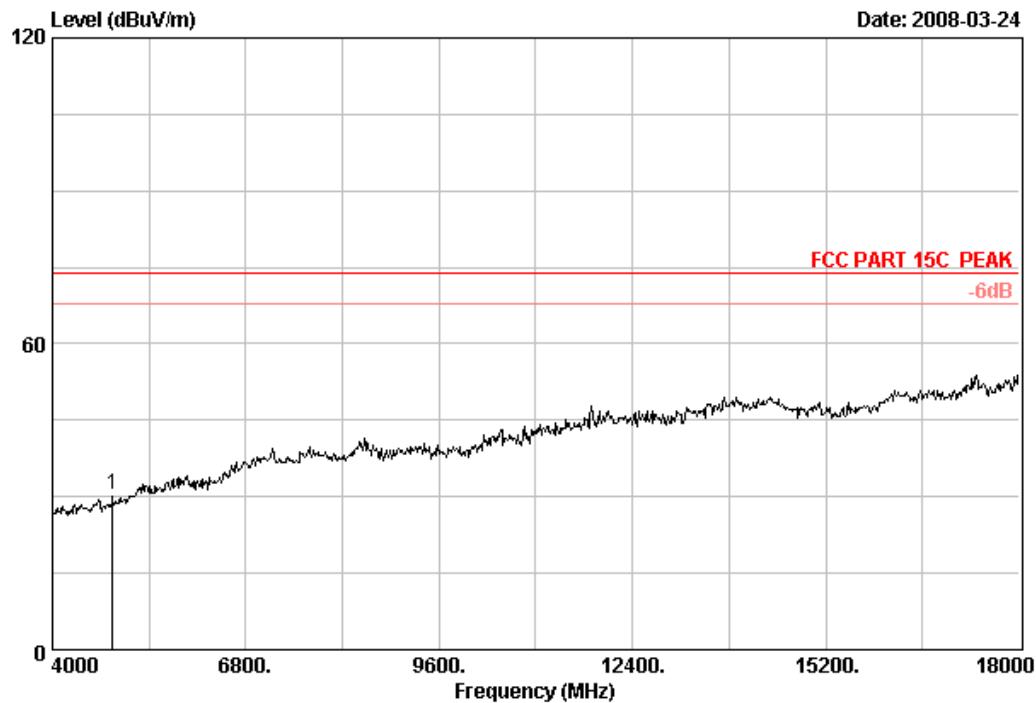
| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 23.68    | 33.92 | 54.00  | 20.08  | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 133 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 133  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4874.00      | 34.16          | 10.56                   | 34.48                 | 20.32           | 30.56           | 74.00              | 43.44          | Peak   |

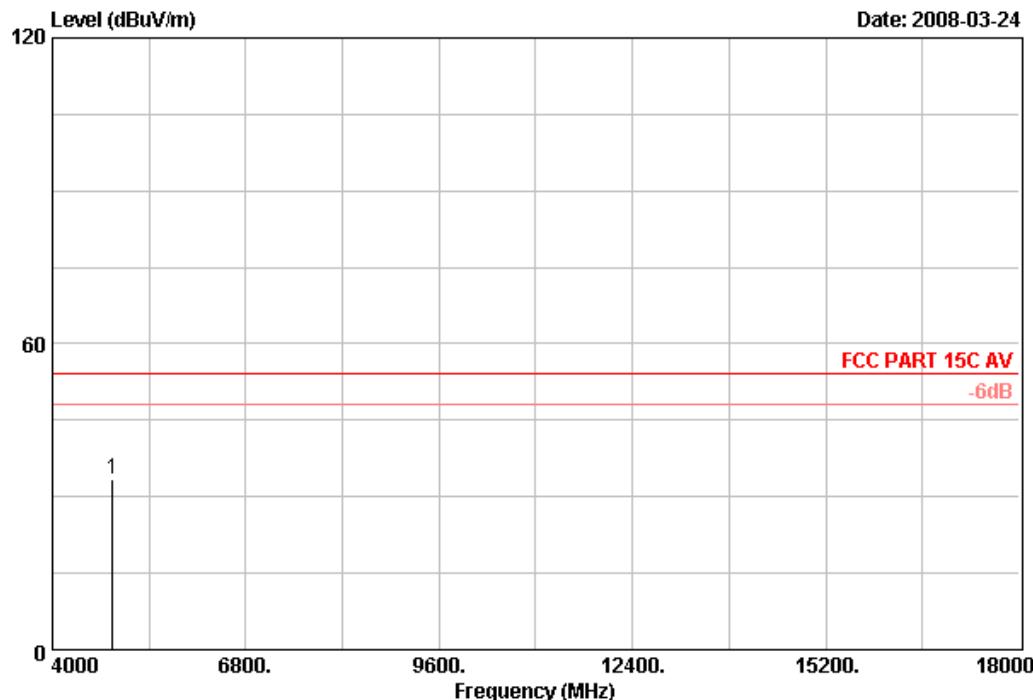
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 134

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 134  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 23.12    | 33.36 | 54.00  | 20.64  | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

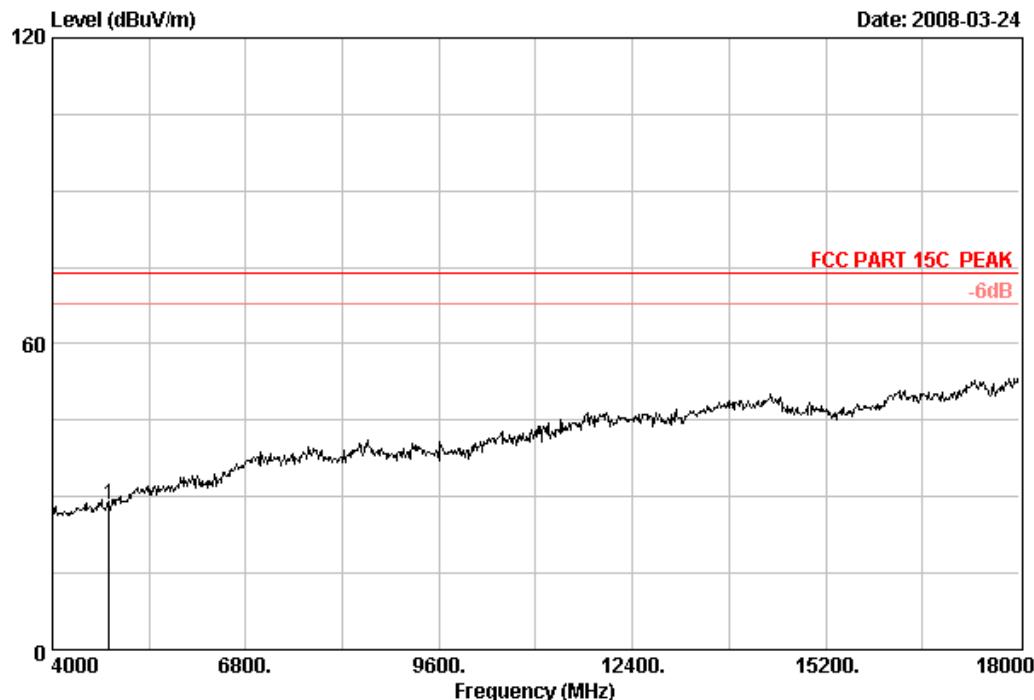


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Data: 135

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 135  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4824.00      | 34.02          | 10.55                   | 34.49                 | 18.19             | 28.27             | 74.00              | 45.73          | Peak   |

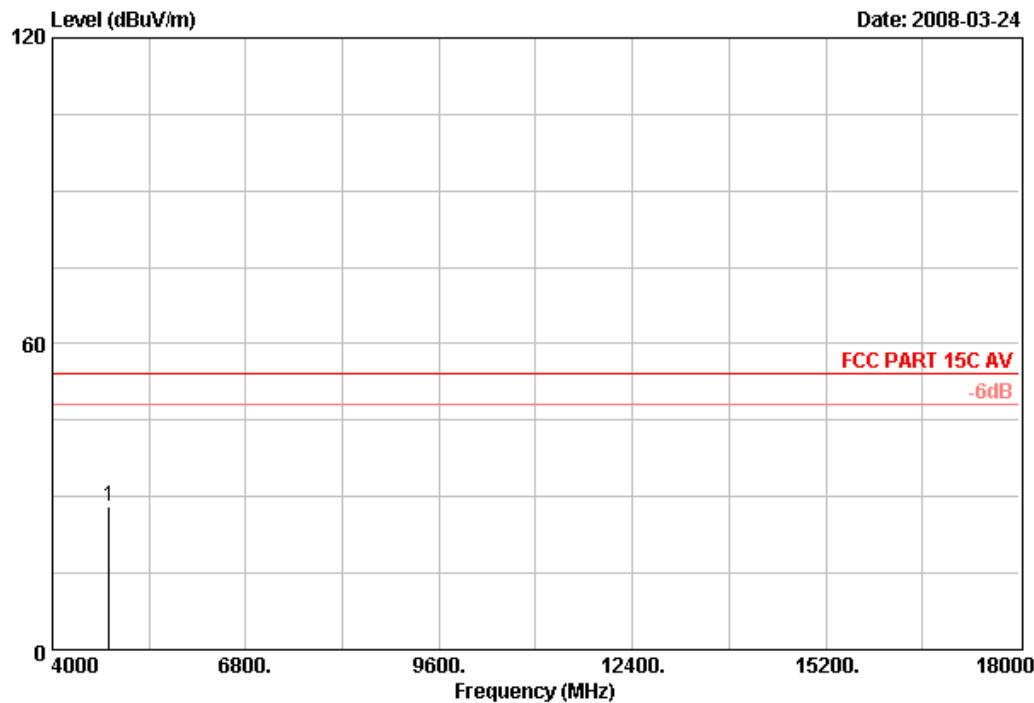
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 136

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 136  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4824.00      | 34.02          | 10.55         | 34.49         | 18.15    | 28.23 | 54.00  | 25.77  | Average |

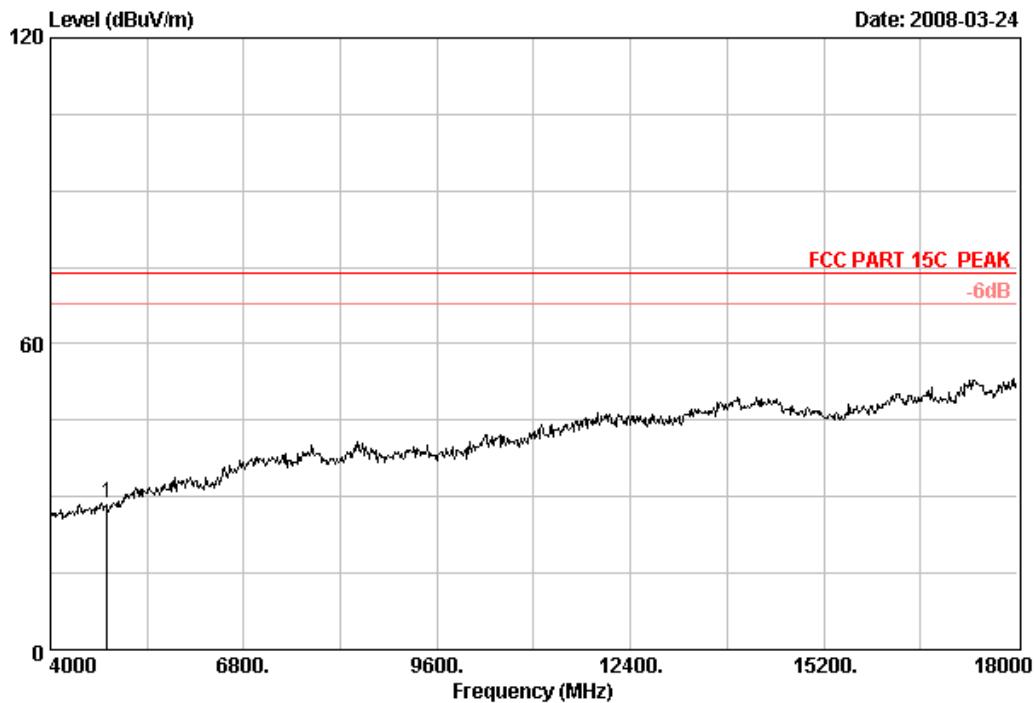
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 137

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 137  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4824.00      | 34.02          | 10.55                   | 34.49                 | 18.57           | 28.65           | 74.00              | 45.35          | Peak   |

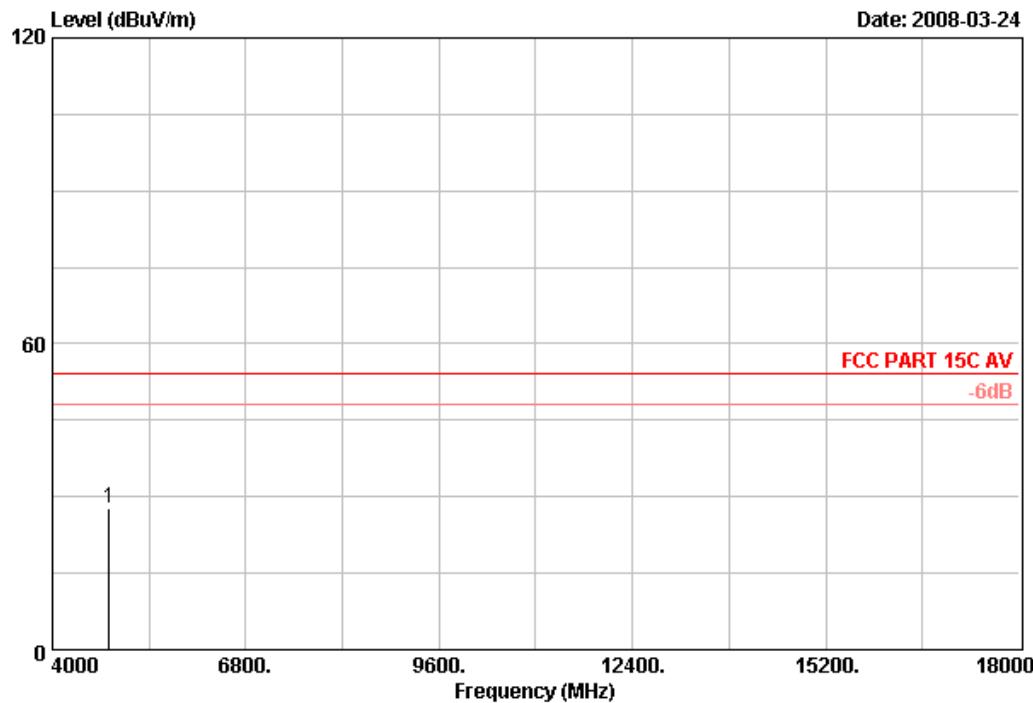
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 138

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 138  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11b CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4824.00      | 34.02          | 10.55         | 34.49         | 17.51    | 27.59 | 54.00  | 26.41  | Average |

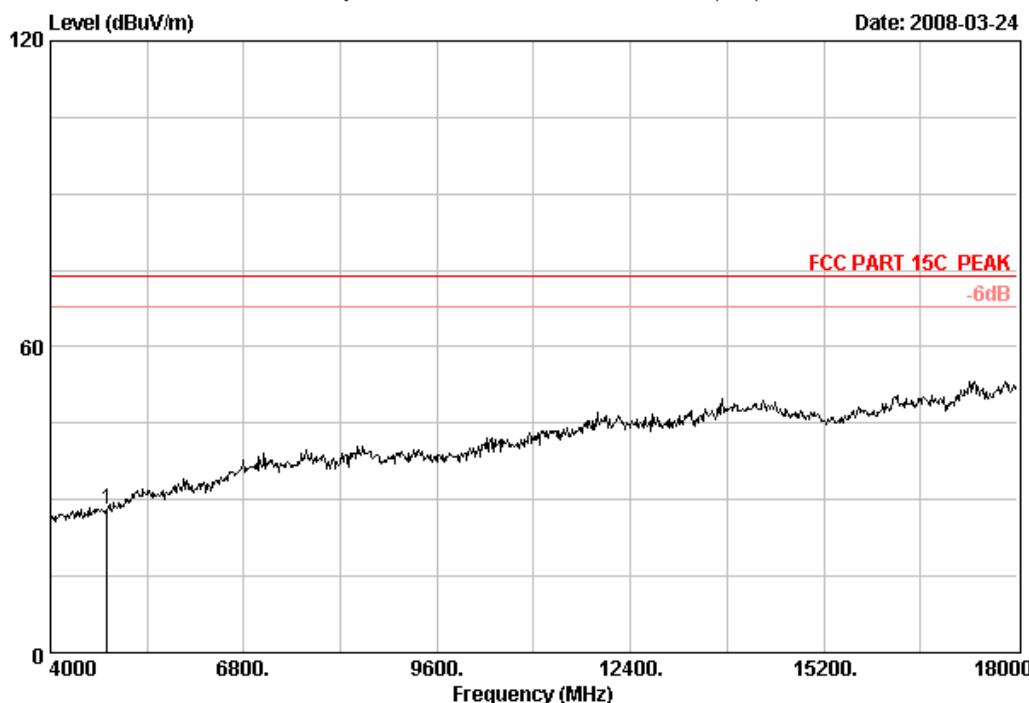
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 139

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 139  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission                       |                                |                                 |                | Remark |
|----------------|----------------|-------------------------|-----------------------|--------------------------------|--------------------------------|---------------------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB <sub>B</sub> V) | Level<br>(dB <sub>B</sub> V/m) | Limits<br>(dB <sub>B</sub> V/m) | Margin<br>(dB) |        |
| 1 4824.00      | 34.02          | 10.55                   | 34.49                 | 18.01                          | 28.09                          | 74.00                           | 45.91          | Peak   |

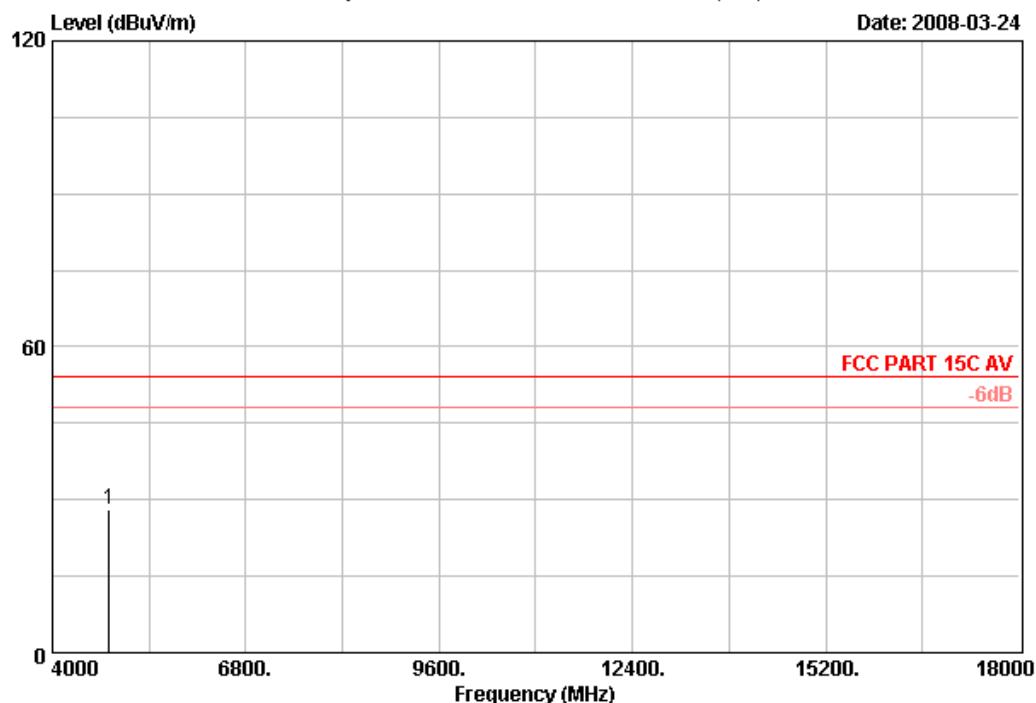
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 140

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 140  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                |         |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|---------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
| 1 4824.00      | 34.02          | 10.55                   | 34.49                 | 18.01           | 28.09           | 54.00              | 25.91          | Average |

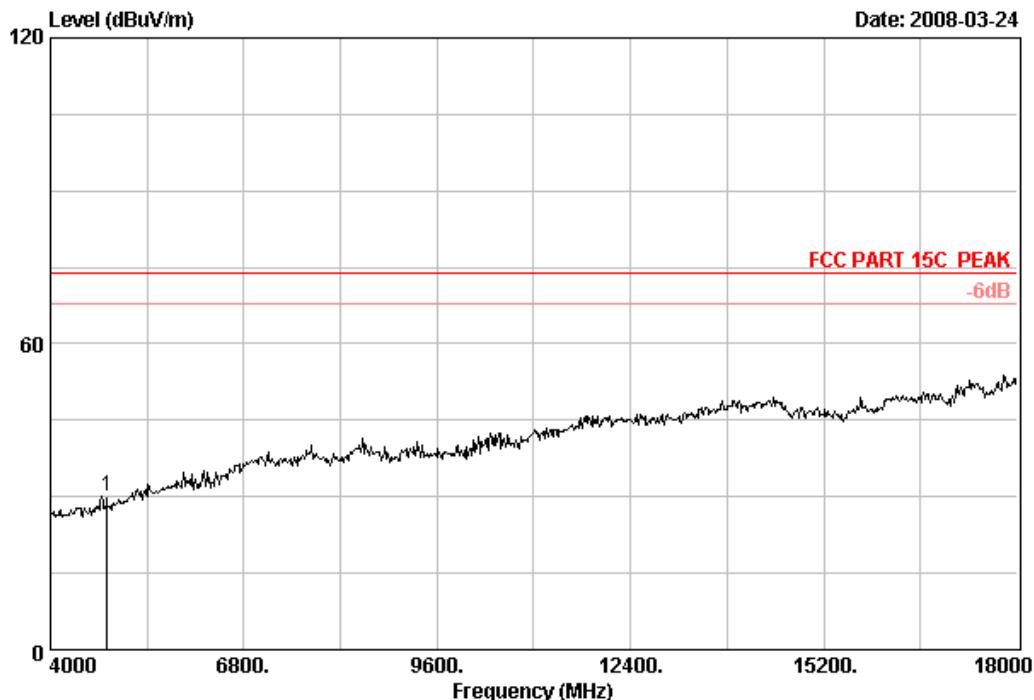
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 141

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 141  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|--------|
|                |                |               |               | Reading  | Level | Limits | Margin |        |
| 1 4824.00      | 34.02          | 10.55         | 34.49         | 20.12    | 30.20 | 74.00  | 43.80  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

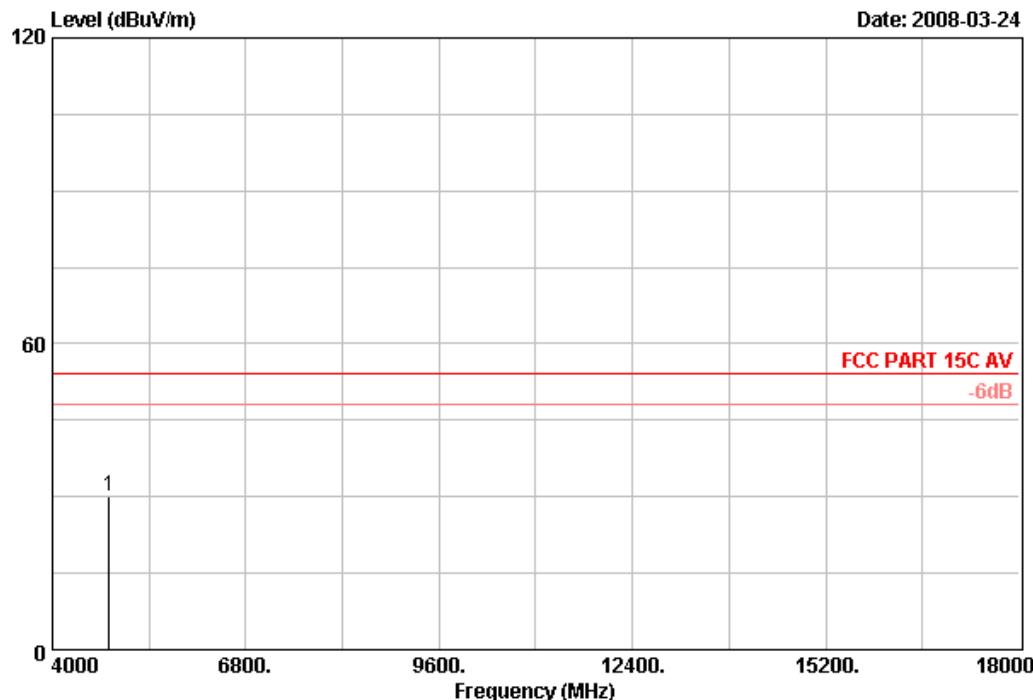


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Data: 142

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 142  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4824.00      | 34.02          | 10.55         | 34.49         | 19.88    | 29.96 | 54.00  | 24.04  | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

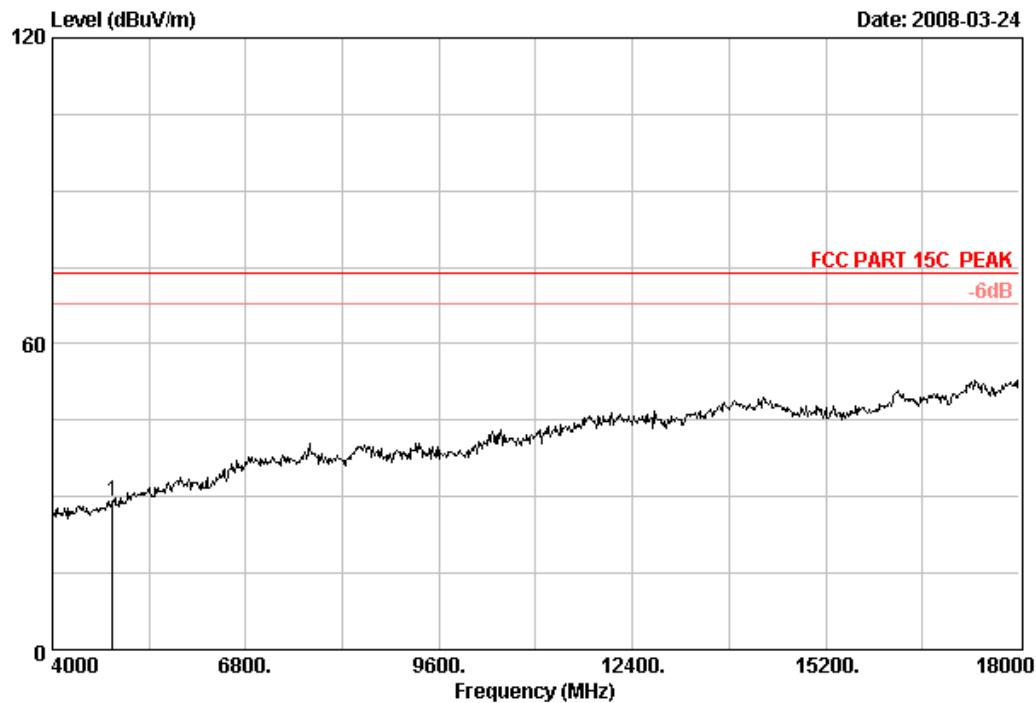


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Data: 143

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 143  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4874.00      | 34.16          | 10.56                   | 34.48                 | 18.75             | 28.99             | 74.00              | 45.01          | Peak   |

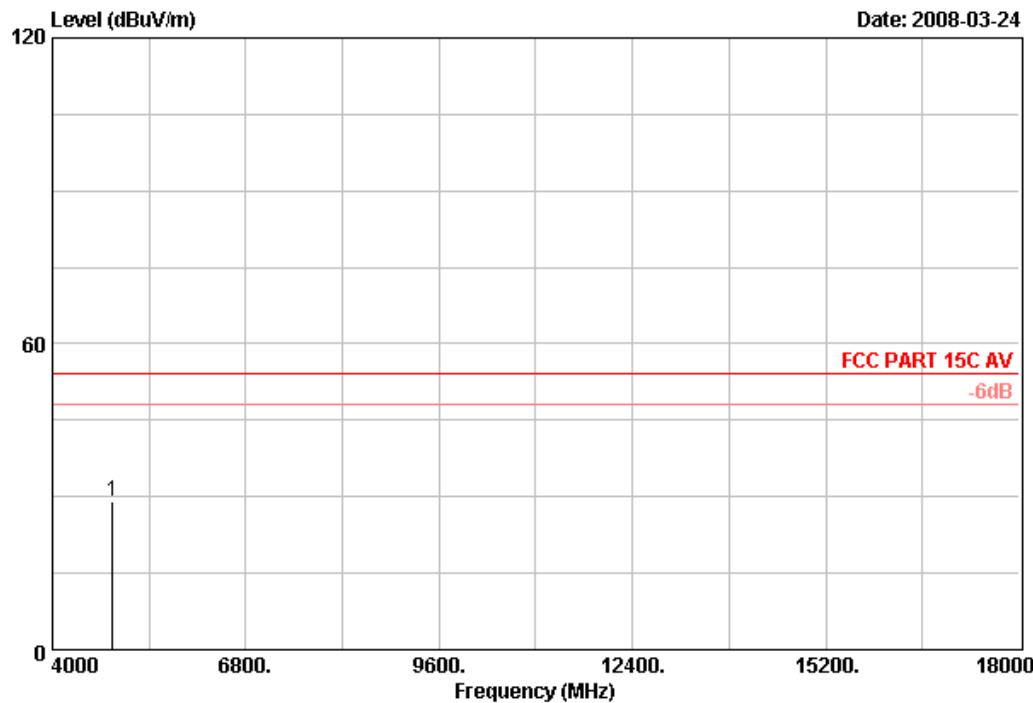
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.



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Data: 144

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 144  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 18.89    | 29.13 | 54.00  | 24.87  | Average |

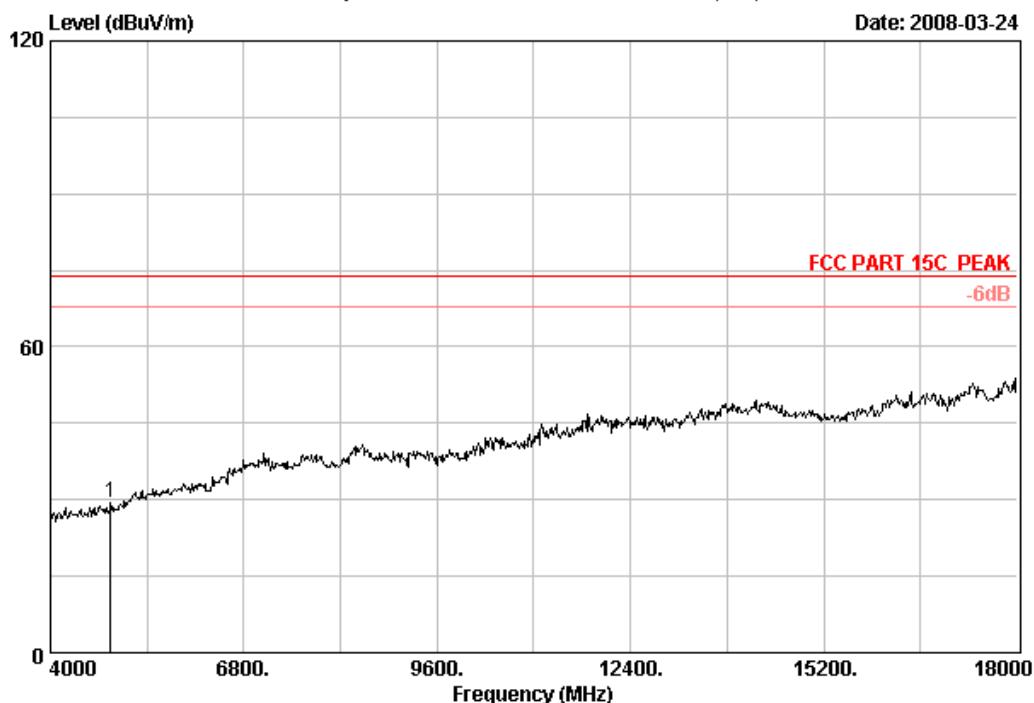
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 145

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 145  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|--------|
|                |                |               |               | Reading  | Level | Limits | Margin |        |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 19.15    | 29.39 | 74.00  | 44.61  | Peak   |

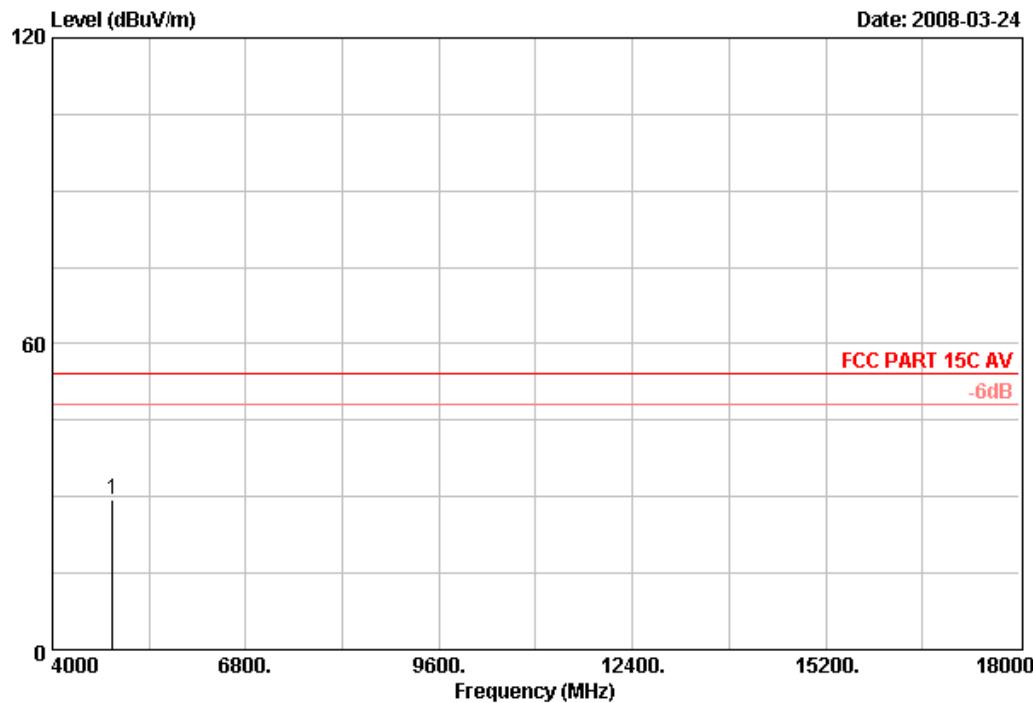
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 146

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 146  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 19.25    | 29.49 | 54.00  | 24.51  | Average |

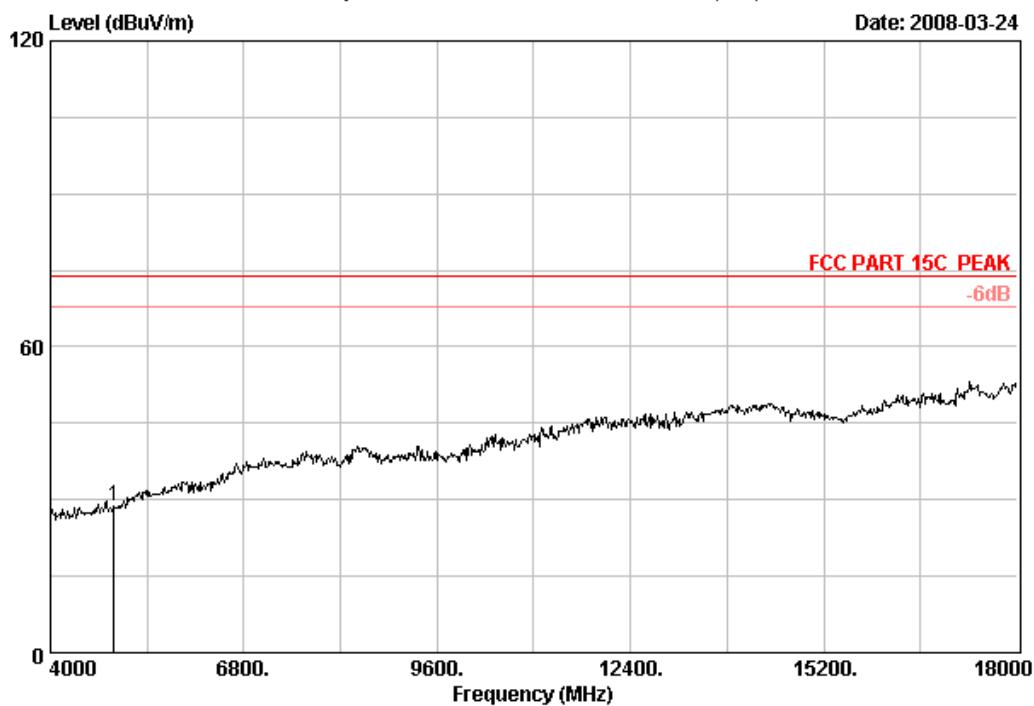
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 147

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 147  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4924.00      | 34.29          | 10.58                   | 34.47                 | 18.41           | 28.81           | 74.00              | 45.19          | Peak   |

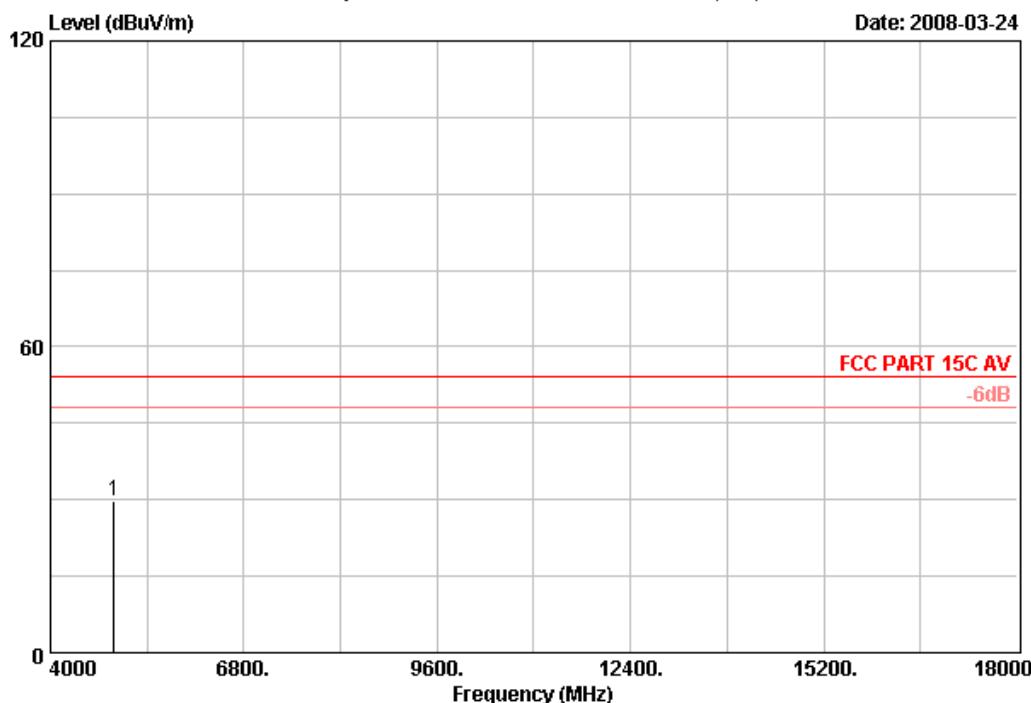
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 148

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 148  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4924.00      | 34.29          | 10.58         | 34.47         | 19.41    | 29.81 | 54.00  | 24.19  | Average |

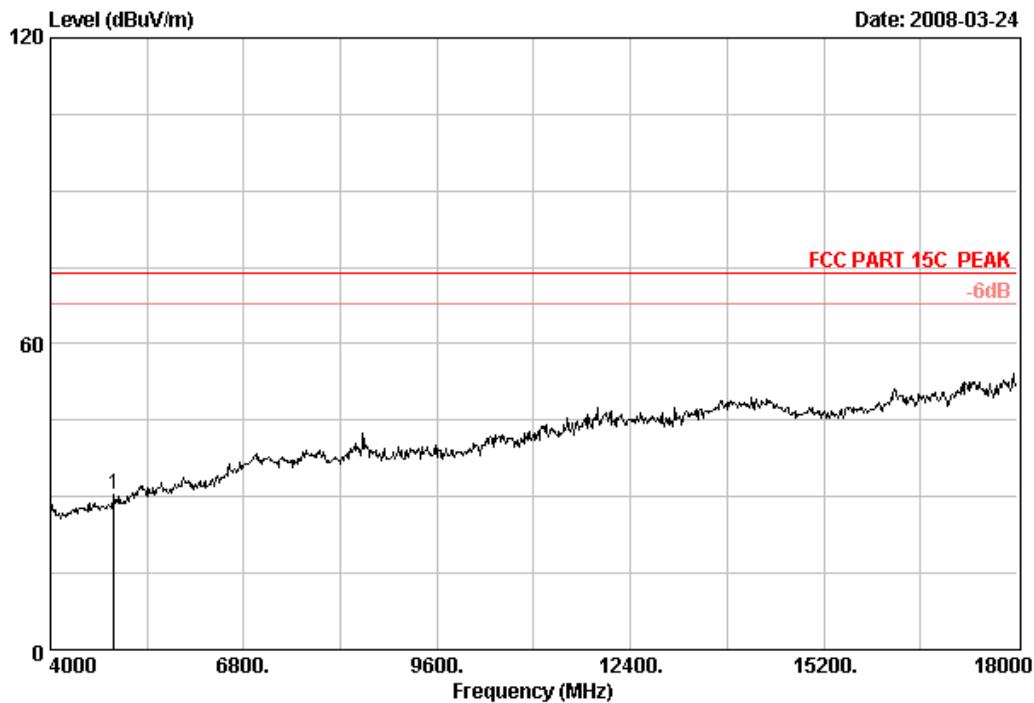
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 149

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 149  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                              |                                 |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|------------------------------|---------------------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dB <sub>B</sub> V) | Limits<br>(dB <sub>B</sub> V/m) | Margin<br>(dB) |        |
| 1 4924.00      | 34.29          | 10.58                   | 34.47                 | 20.06           | 30.46                        | 74.00                           | 43.54          | Peak   |

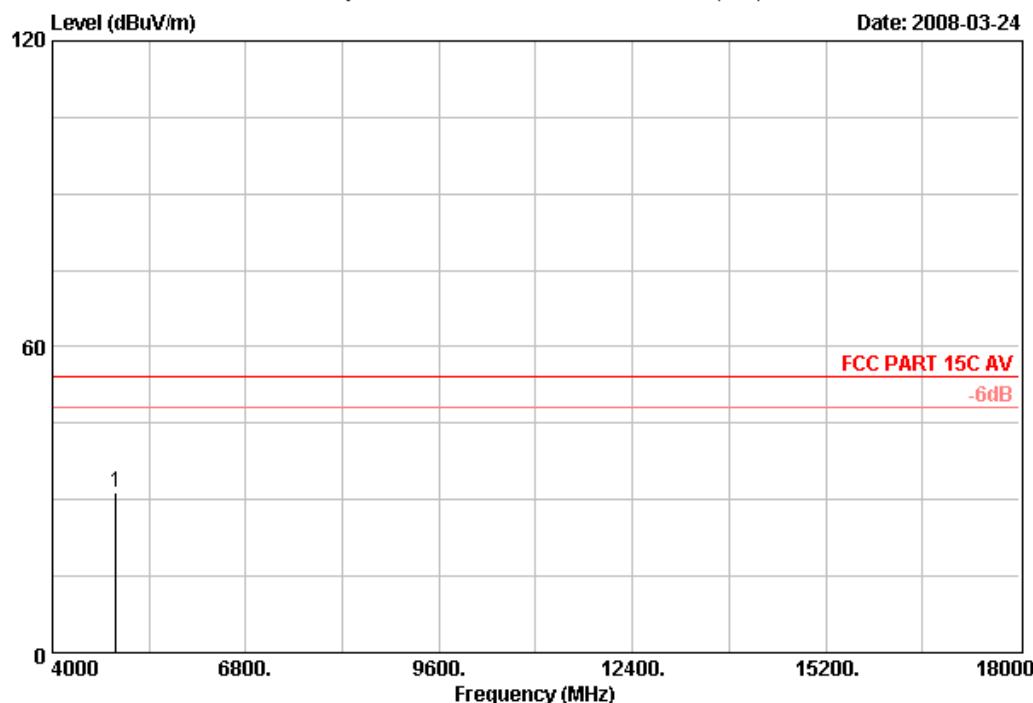
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 150

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 150  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11g CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark  |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|---------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 4924.00      | 34.29          | 10.58                   | 34.47                 | 21.06           | 31.46           | 54.00              | 22.54          | Average |

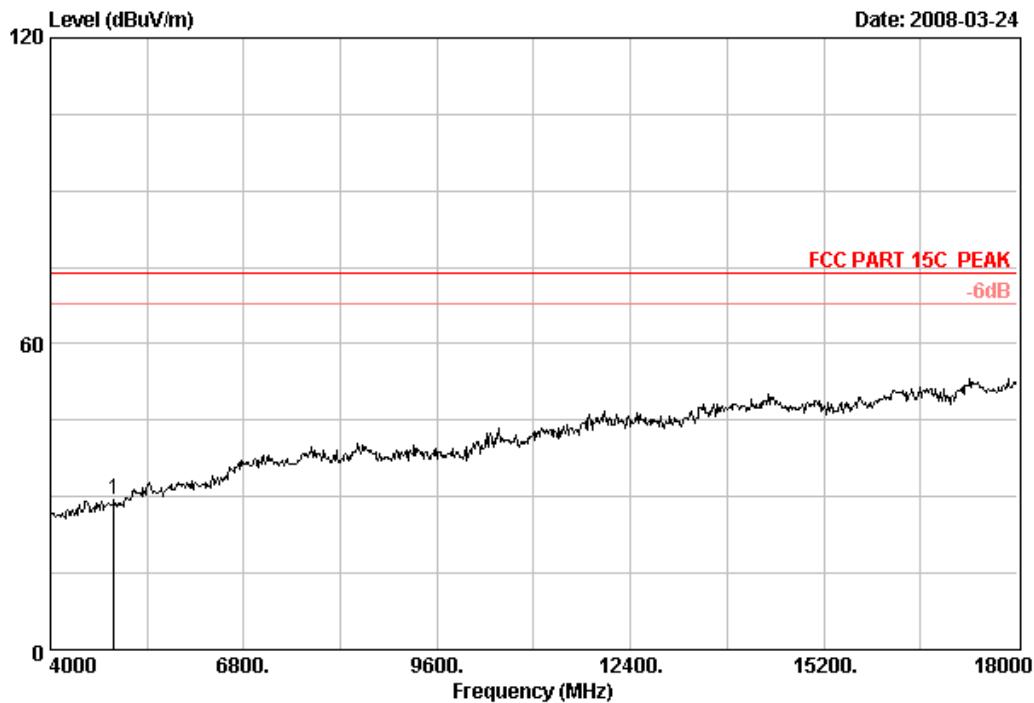
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 151

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 151  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4924.00      | 34.29          | 10.58                   | 34.47                 | 18.88           | 29.28           | 74.00              | 44.72          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

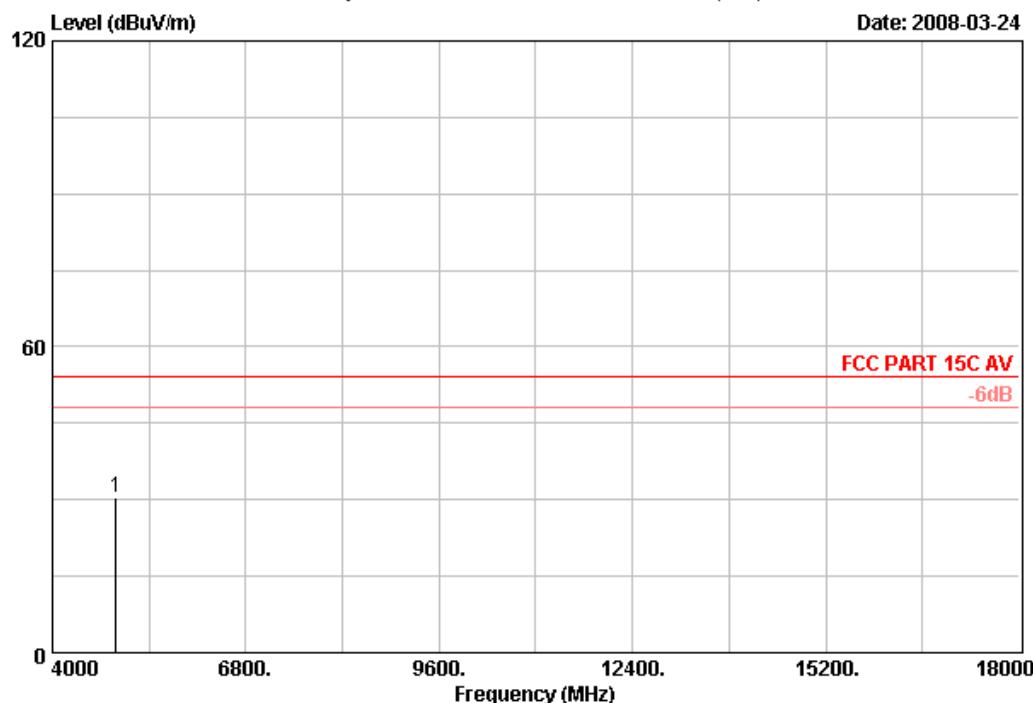


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Postcode:518057

Data: 152

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 152  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark  |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|---------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 4924.00      | 34.29          | 10.58                   | 34.47                 | 19.90           | 30.30           | 54.00              | 23.70          | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

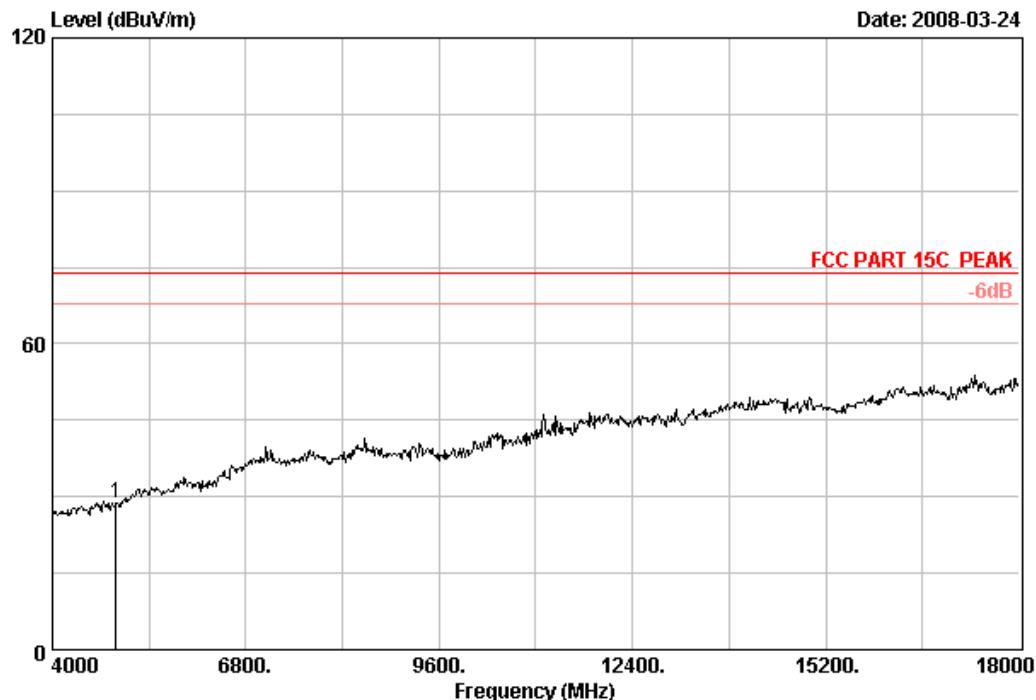


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Data: 153

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 153  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                              |                                 |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|------------------------------|---------------------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dB <sub>B</sub> V) | Limits<br>(dB <sub>B</sub> V/m) | Margin<br>(dB) |        |
| 1 4924.00      | 34.29          | 10.58                   | 34.47                 | 18.40           | 28.80                        | 74.00                           | 45.20          | Peak   |

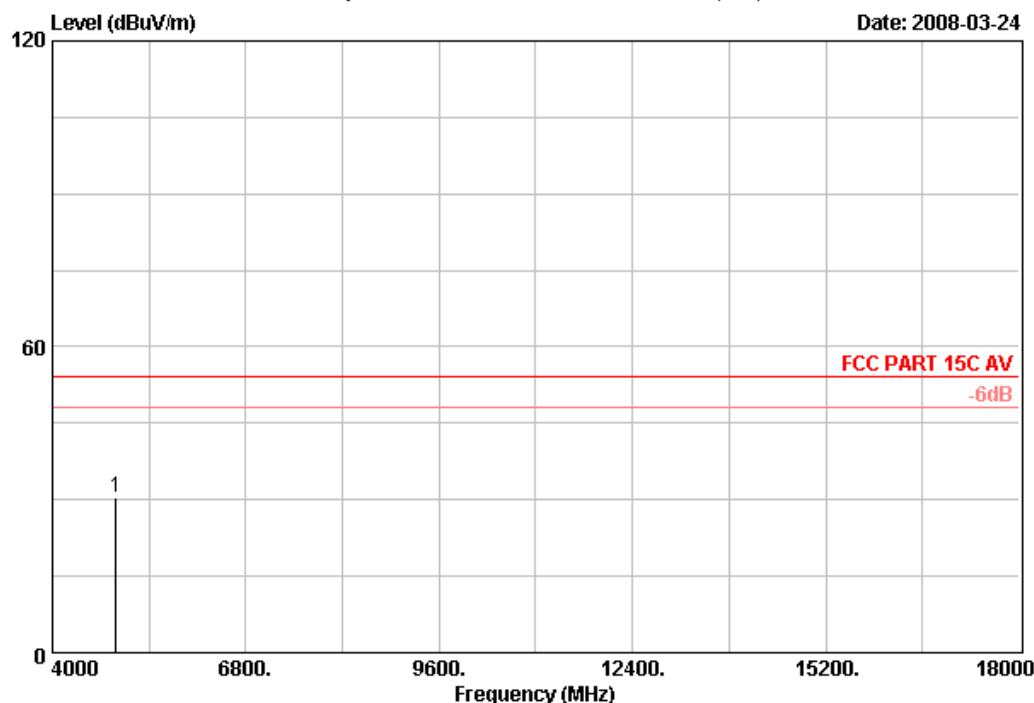
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 154

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 154  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4924.00      | 34.29          | 10.58         | 34.47         | 19.96    | 30.36 | 54.00  | 23.64  | Average |

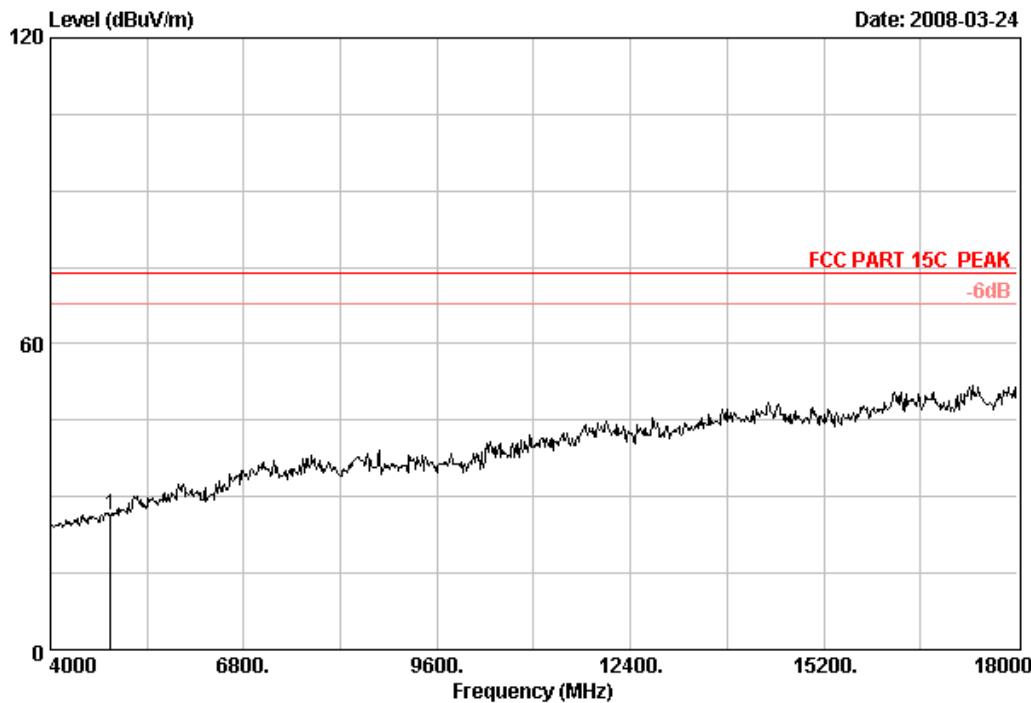
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 155

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 155  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|--------|
|                |                |               |               | Reading  | Level | Limits | Margin |        |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 16.13    | 26.37 | 74.00  | 47.63  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

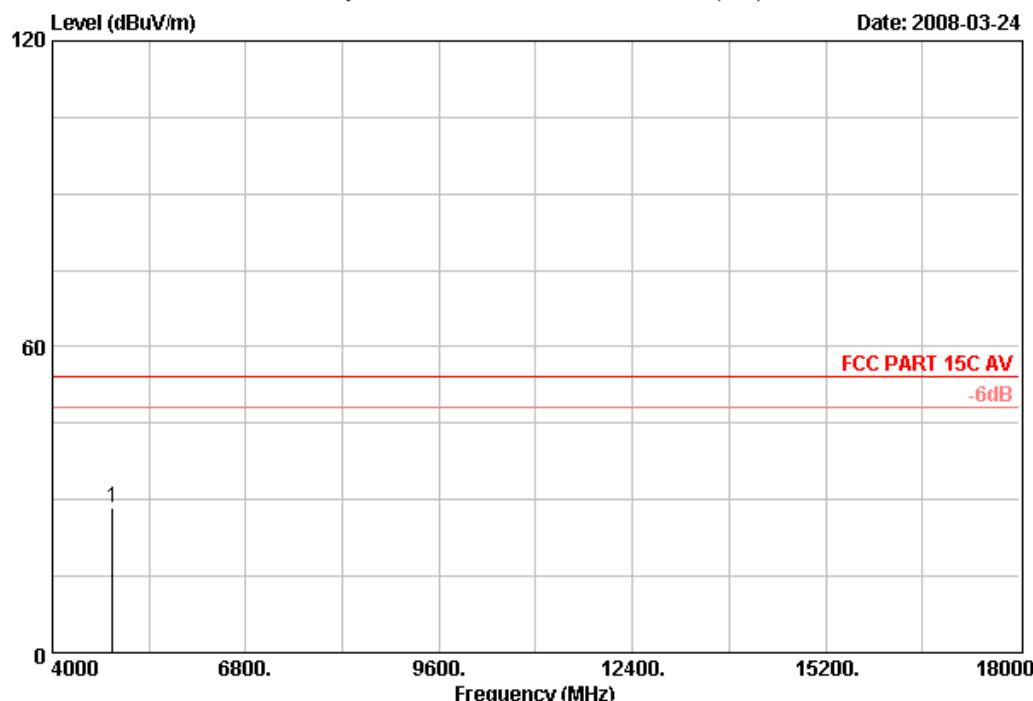


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Data: 156

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 156  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark  |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|---------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 4874.00      | 34.16          | 10.56                   | 34.48                 | 18.13           | 28.37           | 54.00              | 25.63          | Average |

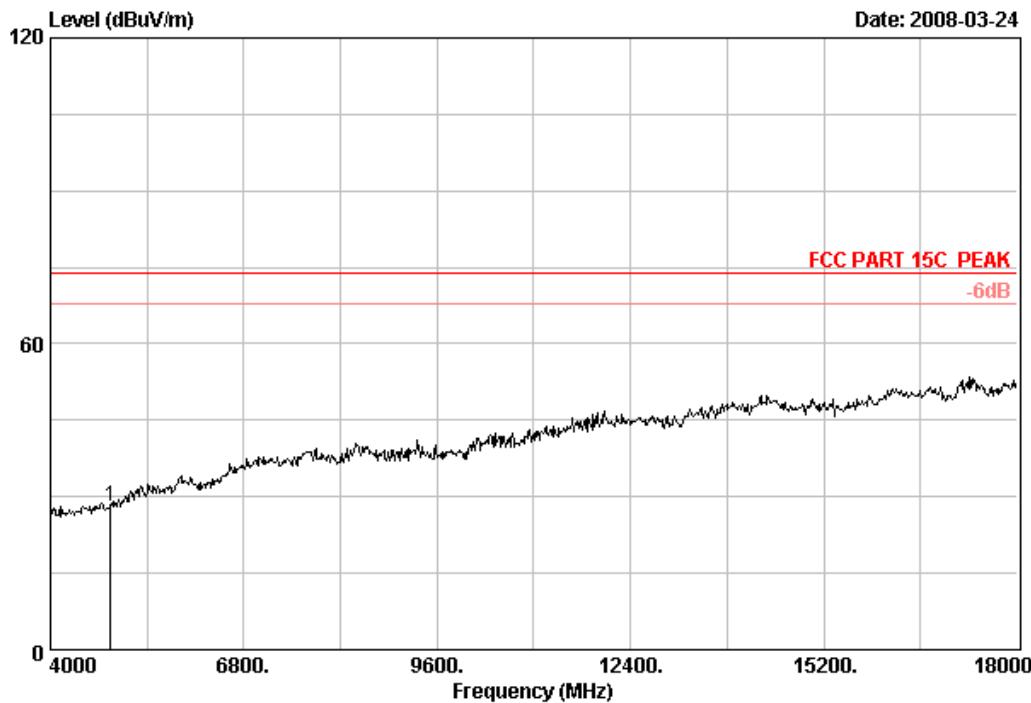
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 157

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 157  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4874.00      | 34.16          | 10.56                   | 34.48                 | 17.83           | 28.07           | 74.00              | 45.93          | Peak   |

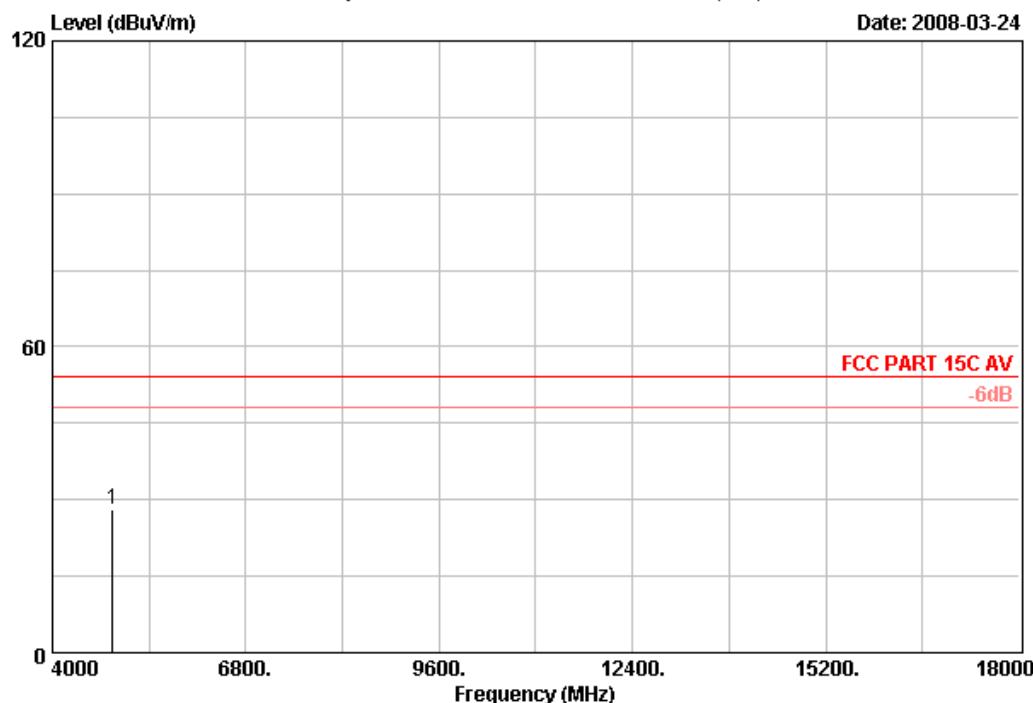
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 158

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 158  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH6:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 17.83    | 28.07 | 54.00  | 25.93  | Average |

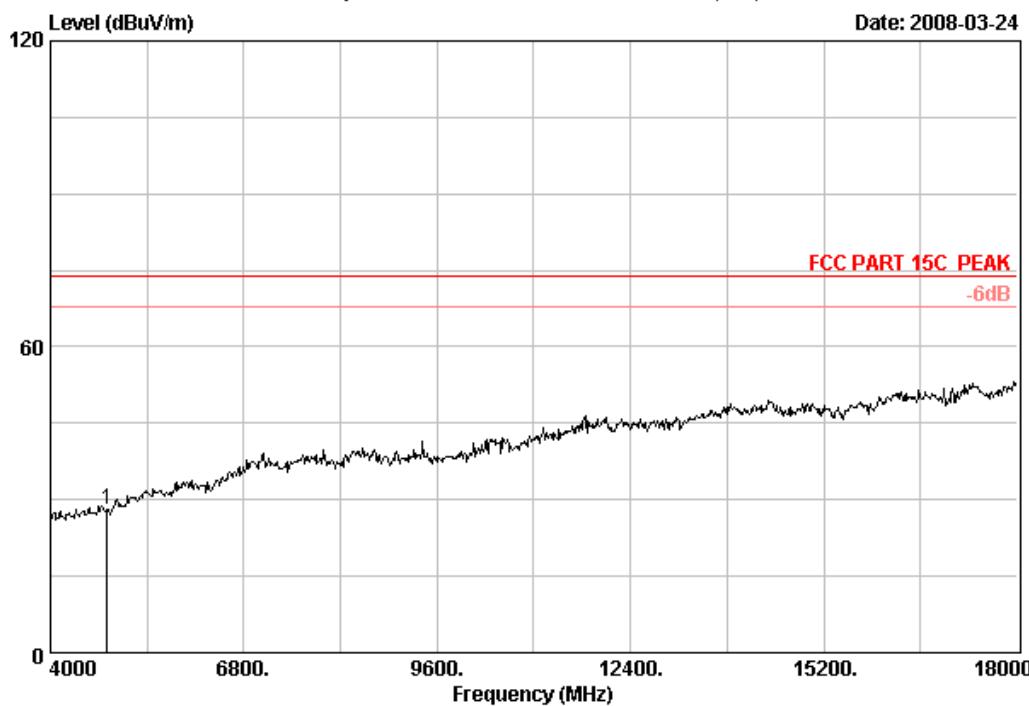
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 159

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Site no. : RF Chamber Data no. : 159  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                |        |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 4824.00      | 34.02          | 10.55                   | 34.49                 | 17.91           | 27.99           | 74.00              | 46.01          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

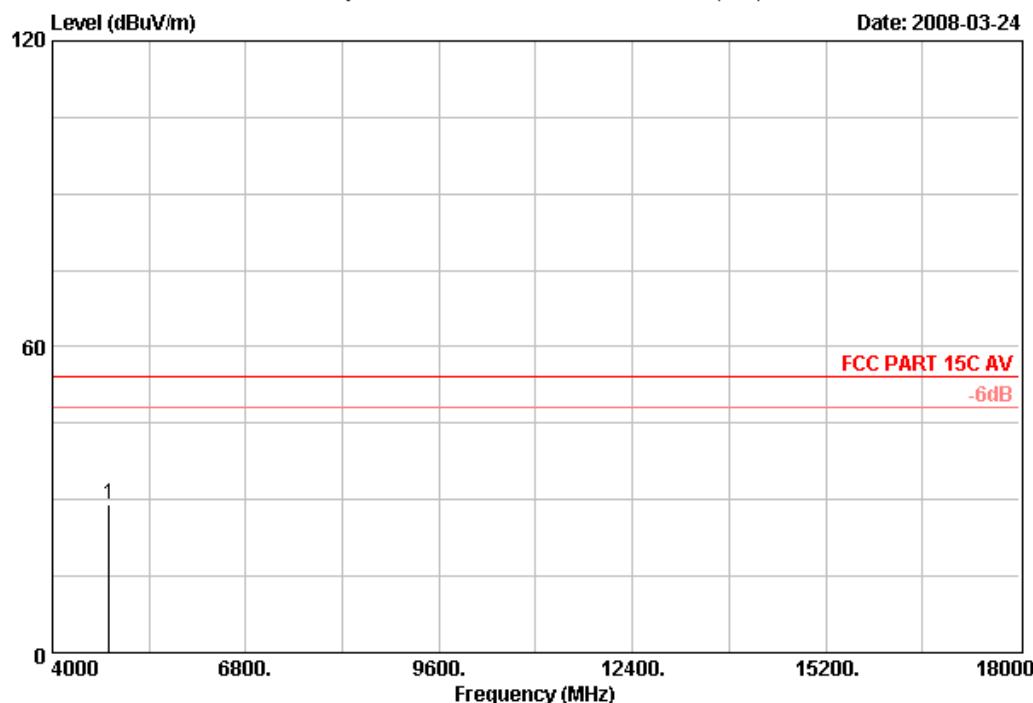


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Data: 160

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 160  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 4824.00      | 34.02                    | 10.55                 | 34.49                 | 18.91             | 28.99             | 54.00              | 25.01          | Average |

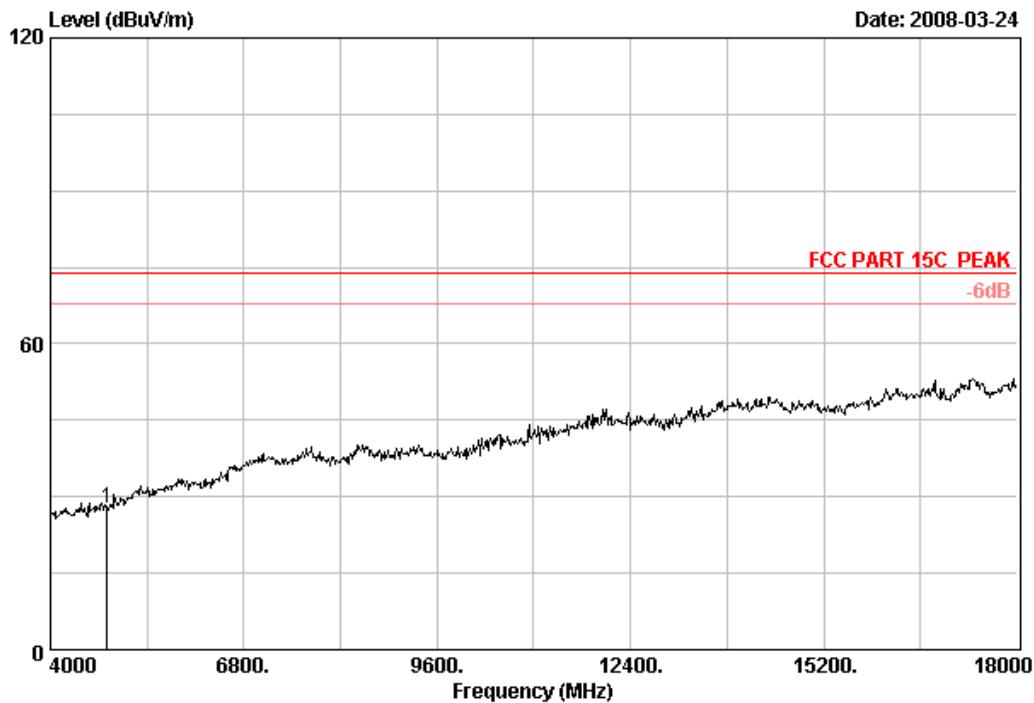
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 161

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 161  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                |        |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 4824.00      | 34.02          | 10.55                   | 34.49                 | 17.78           | 27.86           | 74.00              | 46.14          | Peak   |

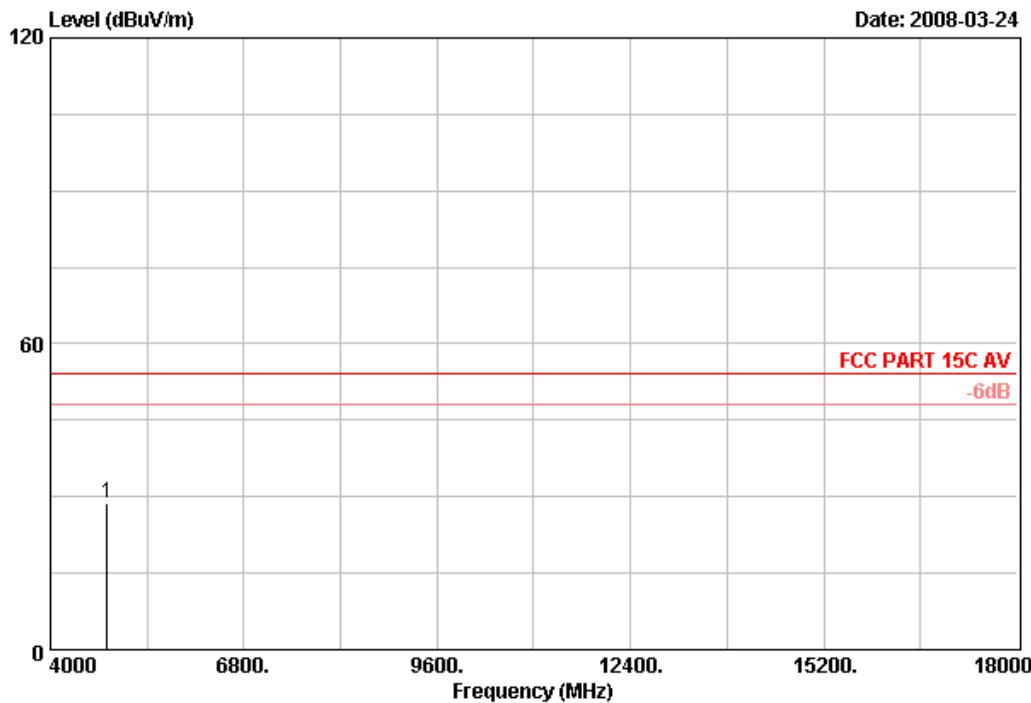
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 162

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 162  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4824.00      | 34.02          | 10.55         | 34.49         | 18.78    | 28.86 | 54.00  | 25.14  | Average |

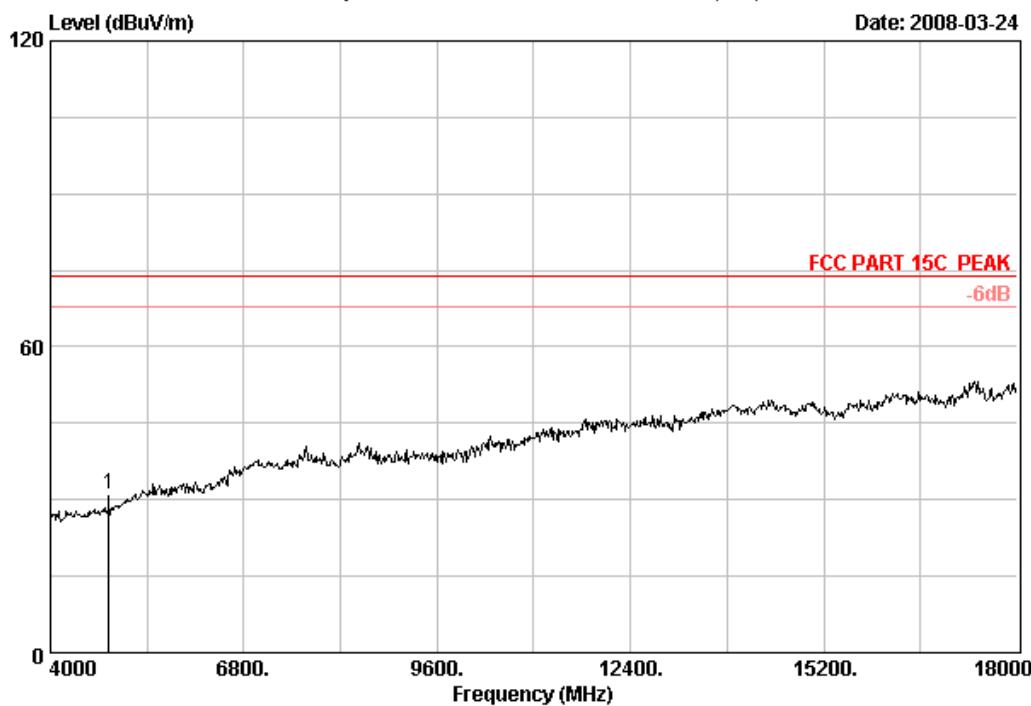
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 163

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 163  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH1:2422MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                              |                                 |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|------------------------------|---------------------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dB <sub>B</sub> V) | Limits<br>(dB <sub>B</sub> V/m) | Margin<br>(dB) |        |
| 1 4844.00      | 34.07          | 10.56                   | 34.49                 | 20.88           | 31.02                        | 74.00                           | 42.98          | Peak   |

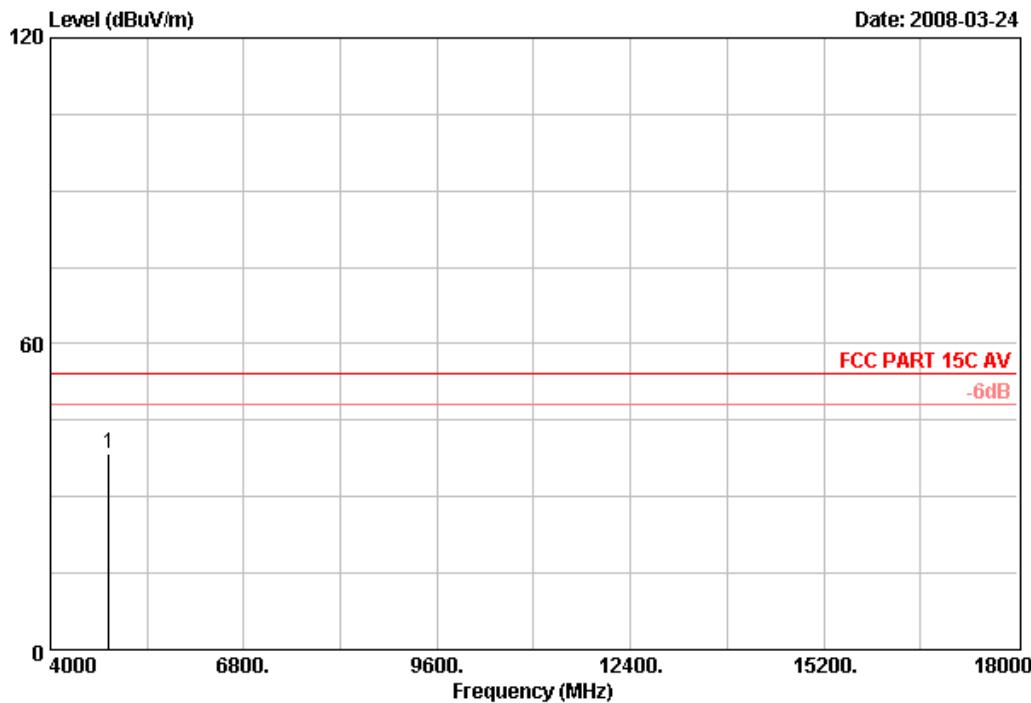
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 164

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 164  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH1:2422MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4844.00      | 34.07          | 10.56         | 34.49         | 28.24    | 38.38 | 54.00  | 15.62  | Average |

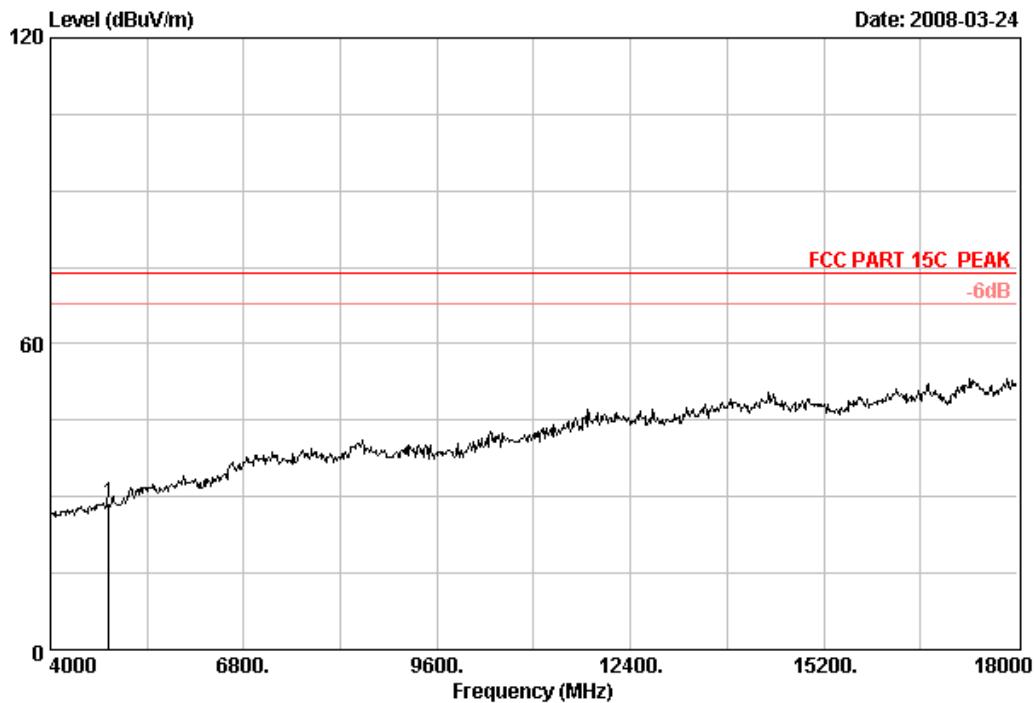
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 165

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 165  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH1:2422MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|--------|
|                |                |               |               | Reading  | Level | Limits | Margin |        |
| 1 4844.00      | 34.07          | 10.56         | 34.49         | 18.53    | 28.67 | 74.00  | 45.33  | Peak   |

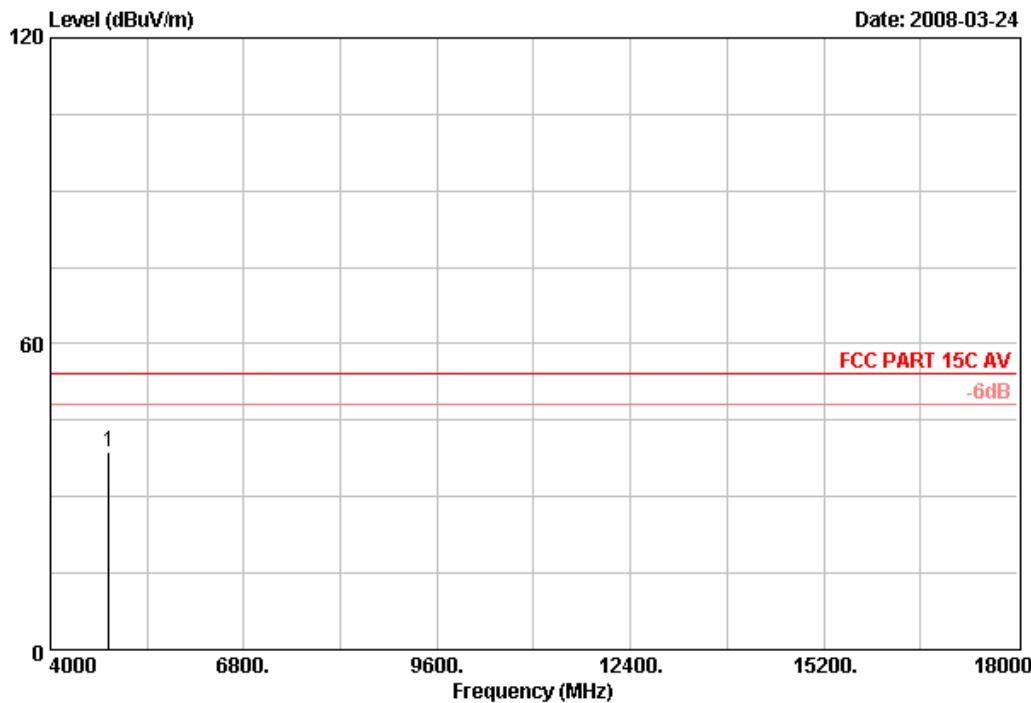
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 166

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 166  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH1:2422MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4844.00      | 34.07          | 10.56         | 34.49         | 28.62    | 38.76 | 54.00  | 15.24  | Average |

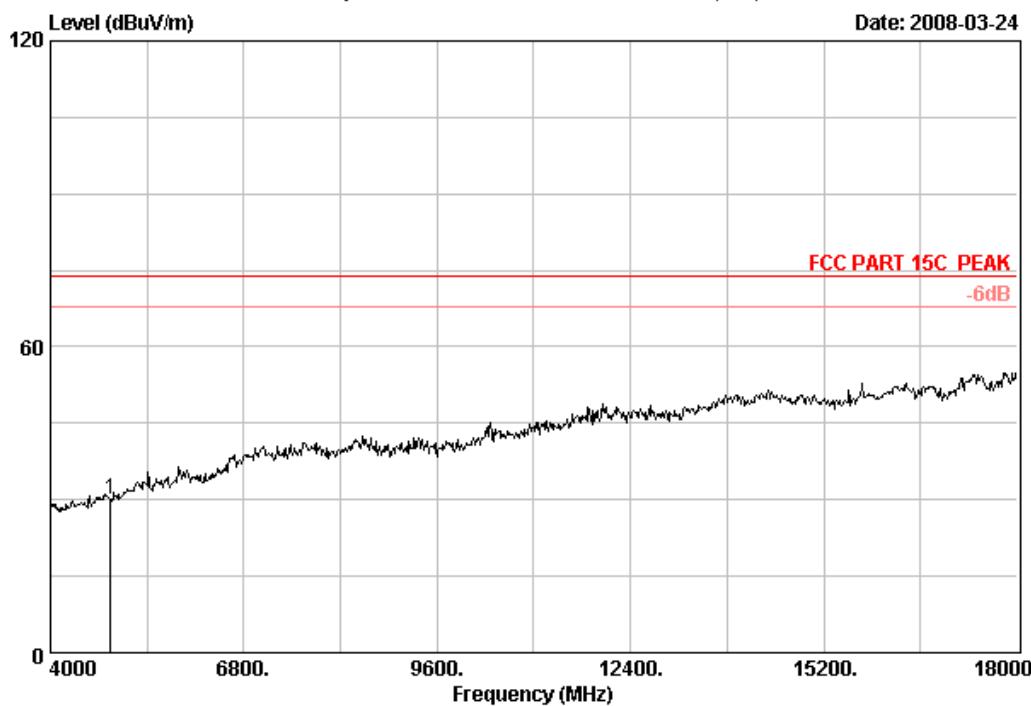
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 167

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 167  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH4:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4874.00      | 34.16          | 10.56                   | 34.48                 | 19.83             | 30.07             | 74.00              | 43.93          | Peak   |

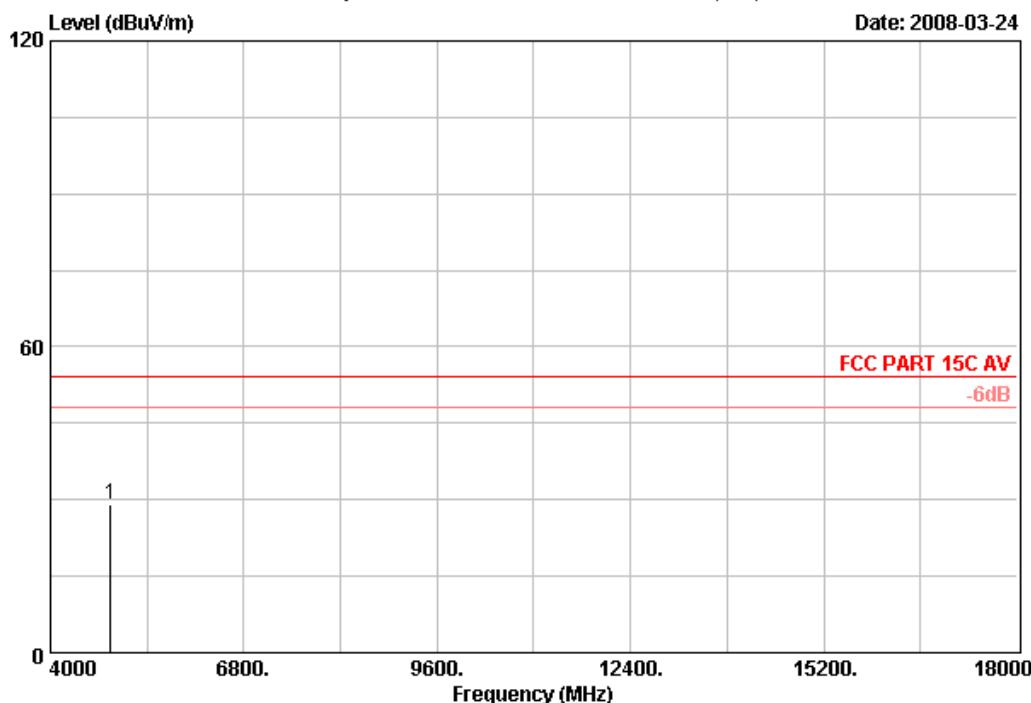
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 168

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 168  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH4:2437MHz Tx

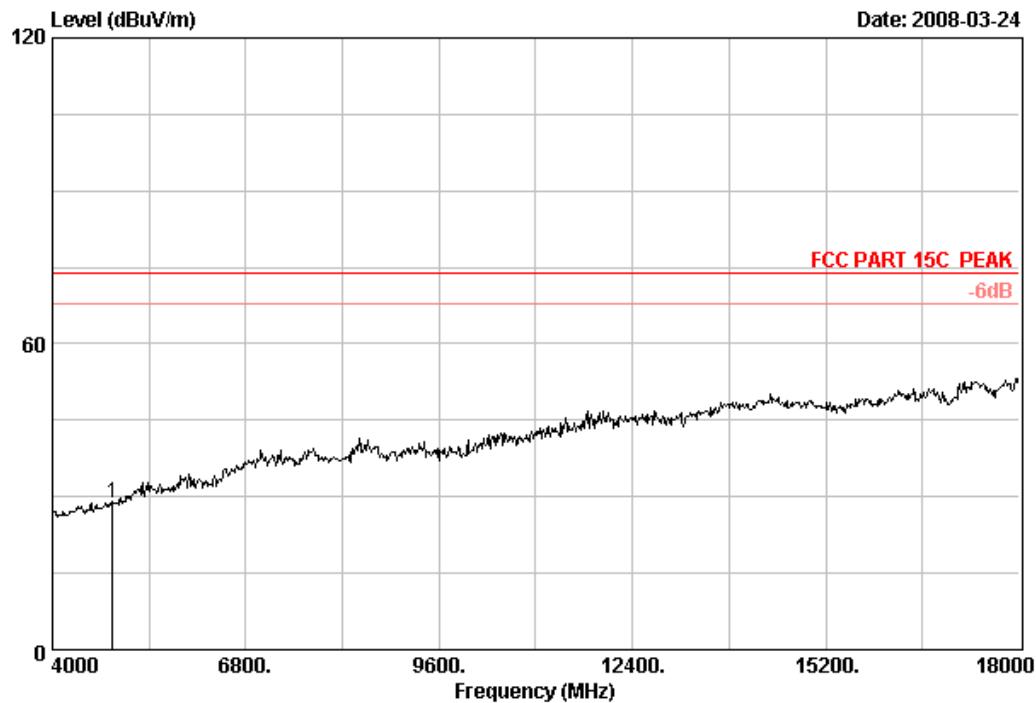
| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 18.83    | 29.07 | 54.00  | 24.93  | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 169 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 169  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH4:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4874.00      | 34.16          | 10.56                   | 34.48                 | 18.66             | 28.90             | 74.00              | 45.10          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

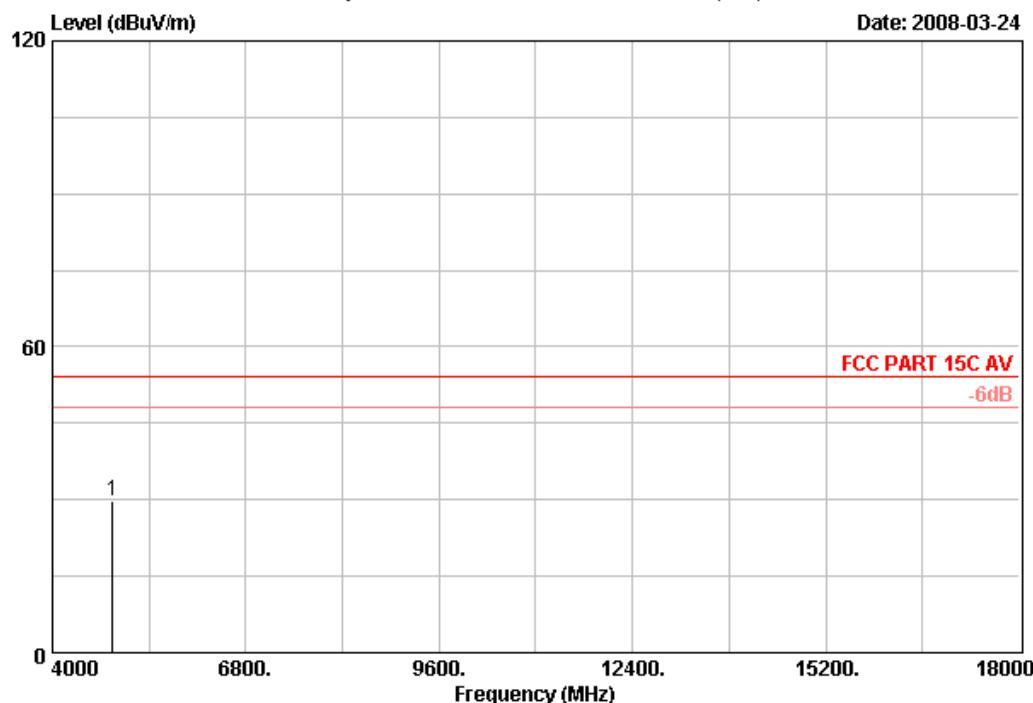


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Postcode:518057

Data: 170

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)

Date: 2008-03-24



Site no. : RF Chamber Data no. : 170  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH4:2437MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4874.00      | 34.16          | 10.56         | 34.48         | 19.66    | 29.90 | 54.00  | 24.10  | Average |

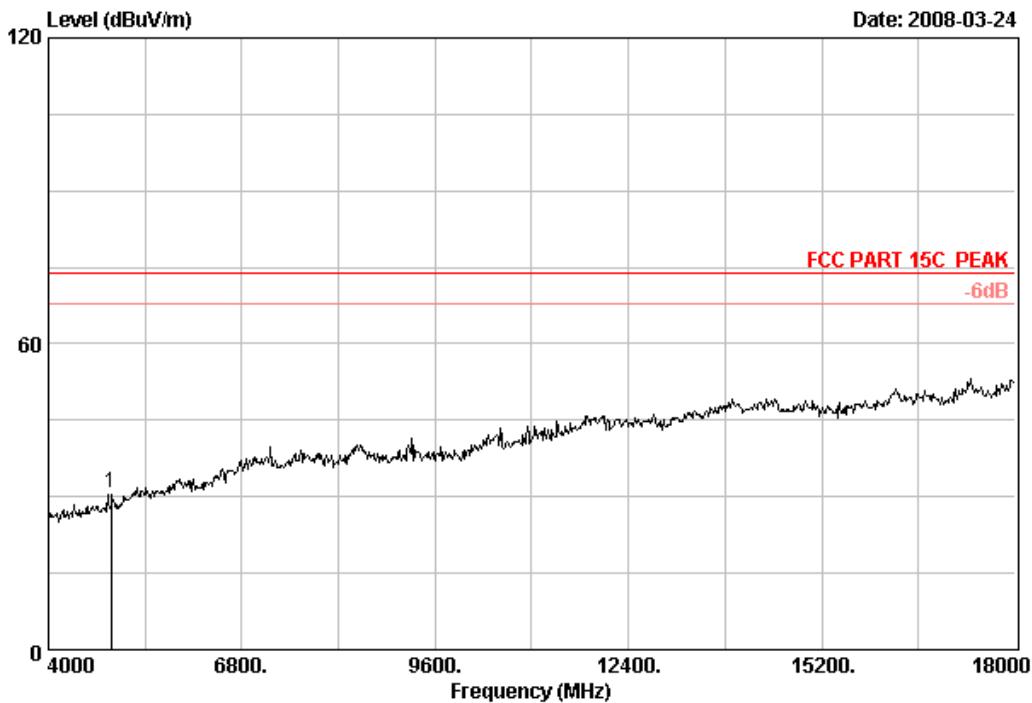
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 171

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 171  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH7:2452MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|--------|
|                |                |               |               | Reading  | Level | Limits | Margin |        |
| 1 4904.00      | 34.25          | 10.58         | 34.48         | 20.45    | 30.80 | 74.00  | 43.20  | Peak   |

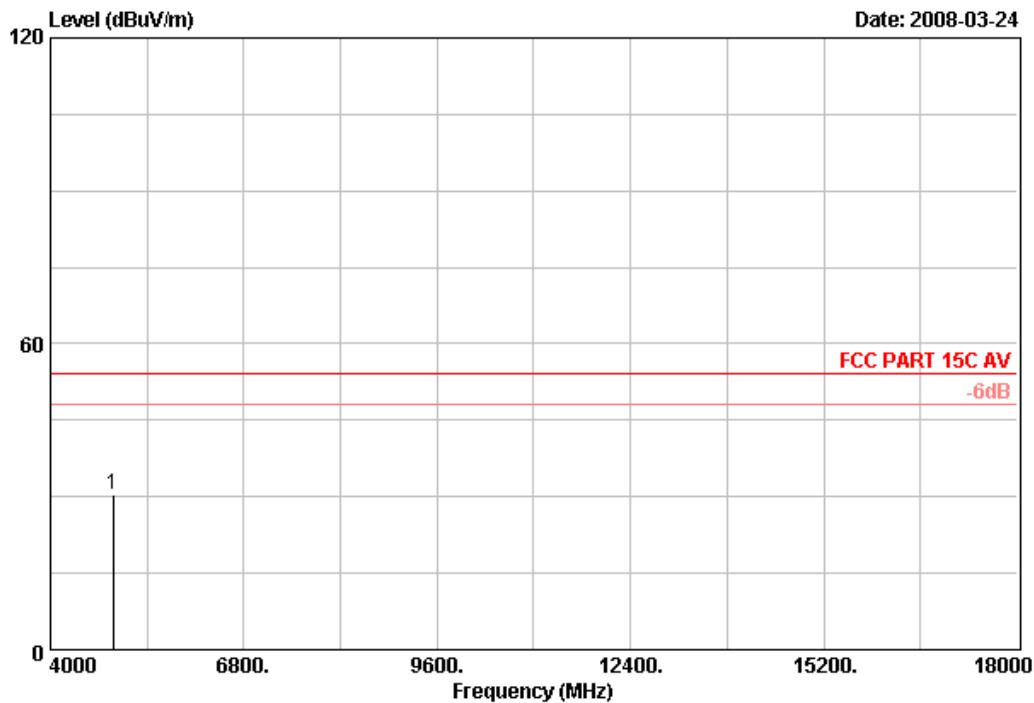
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 172

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 172  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH7:2452MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4904.00      | 34.25          | 10.58         | 34.48         | 20.15    | 30.50 | 54.00  | 23.50  | Average |

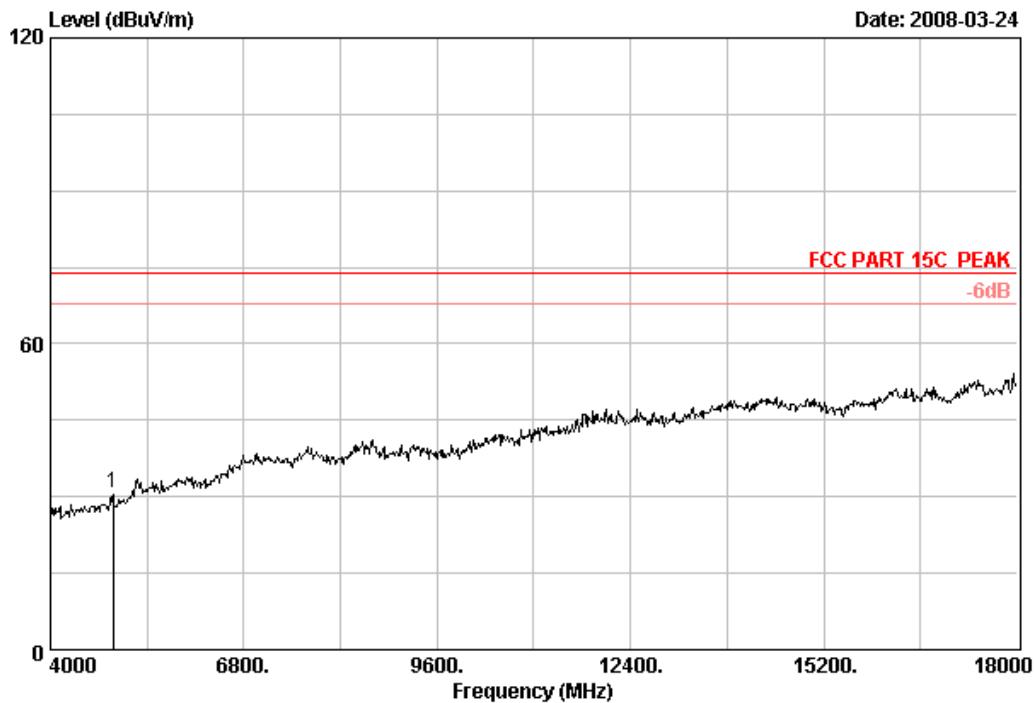
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 173

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 173  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH7:2452MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss<br>(dB/m) | Amp<br>Factor<br>(dB) | Emission        |                 |                    |                | Remark |
|----------------|----------------|-------------------------|-----------------------|-----------------|-----------------|--------------------|----------------|--------|
|                |                |                         |                       | Reading<br>(dB) | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 4904.00      | 34.25          | 10.58                   | 34.48                 | 20.25           | 30.60           | 74.00              | 43.40          | Peak   |

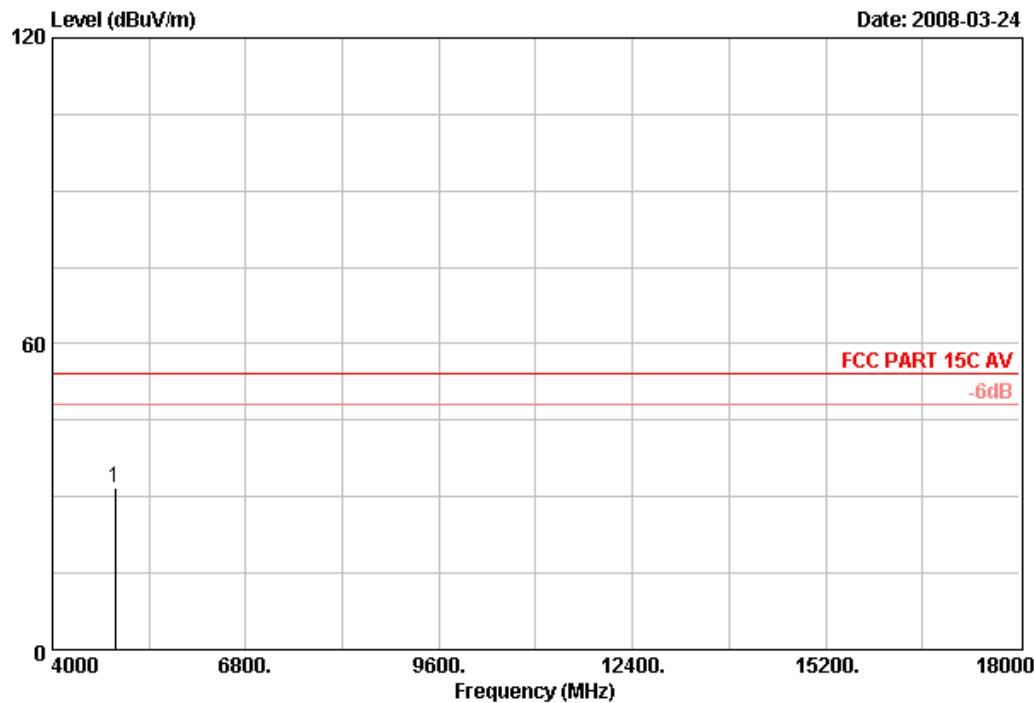
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 174

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (174)



Site no. : RF Chamber Data no. : 174  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter 120V/60Hz  
 Test Mode : IEEE802.11n CH7:2452MHz Tx

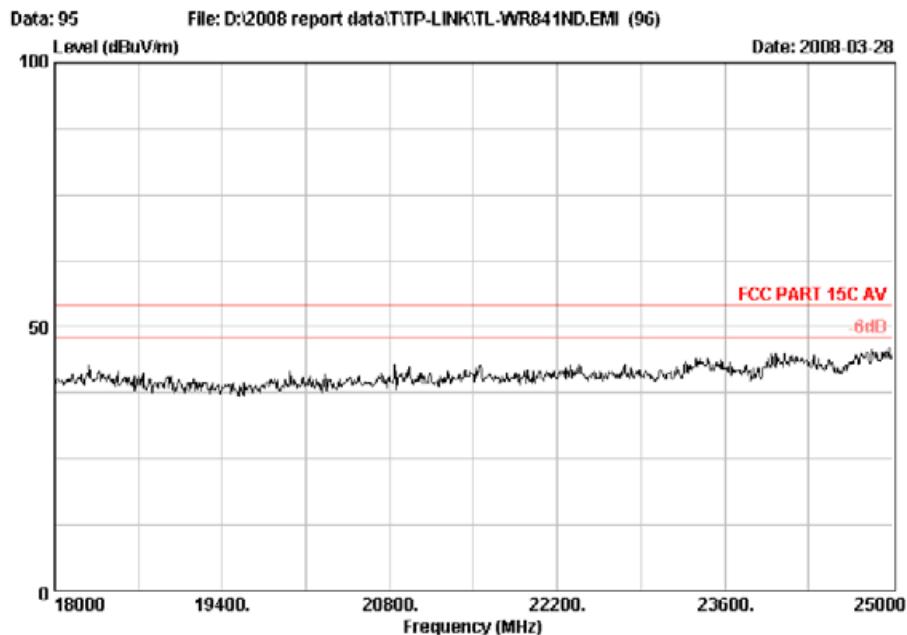
| Freq.<br>(MHz) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Factor | Emission |       |        |        | Remark  |
|----------------|----------------|---------------|---------------|----------|-------|--------|--------|---------|
|                |                |               |               | Reading  | Level | Limits | Margin |         |
| 1 4904.00      | 34.25          | 10.58         | 34.48         | 21.56    | 31.91 | 54.00  | 22.09  | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

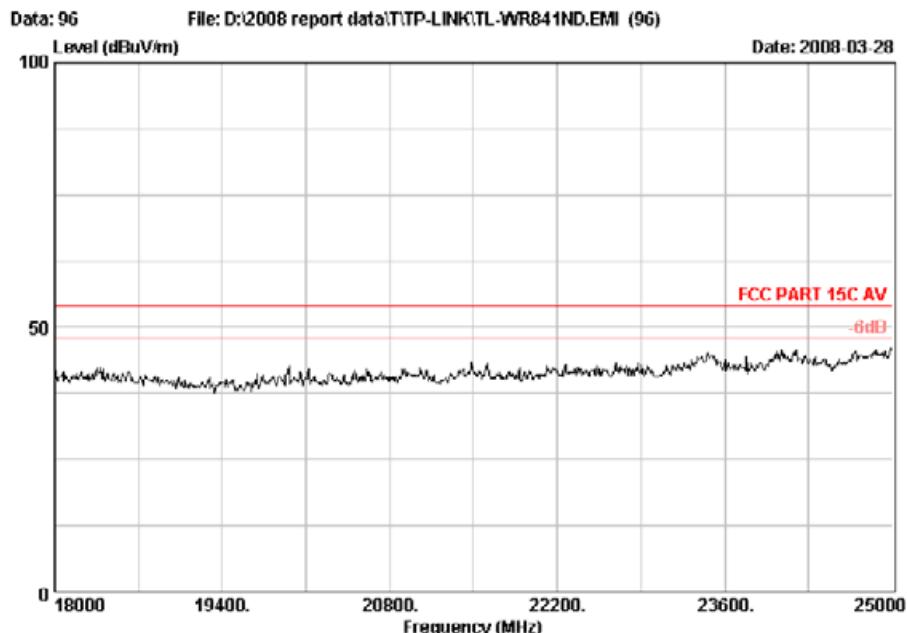
Frequency: 18GHz~25GHz



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Postcode:518057



Site no. : 3m Chamber Data no. : 95  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH1:2412MHz Tx  
Memo :



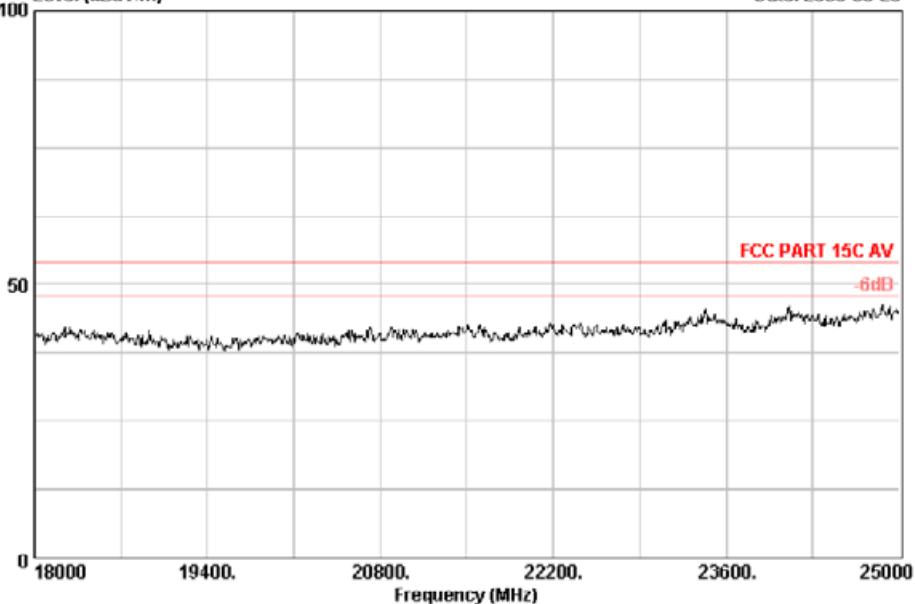
Site no. : 3m Chamber Data no. : 96  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH1:2412MHz Tx  
Memo :



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Data: 94 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)

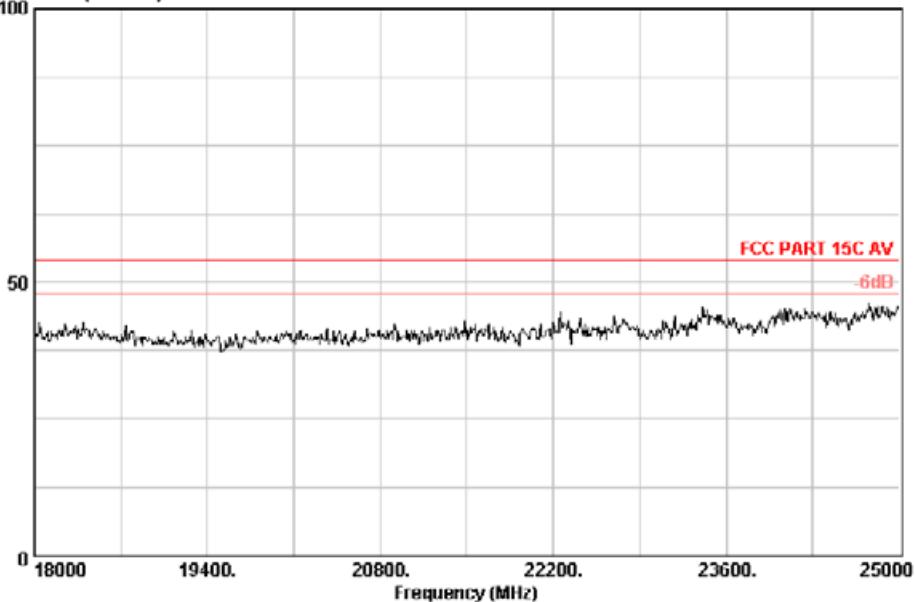
Level (dBuV/m) Date: 2008-03-28



Site no. : 3m Chamber Data no. : 94  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH6:2437MHz Tx  
Memo :

Data: 93 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)

Level (dBuV/m) Date: 2008-03-28



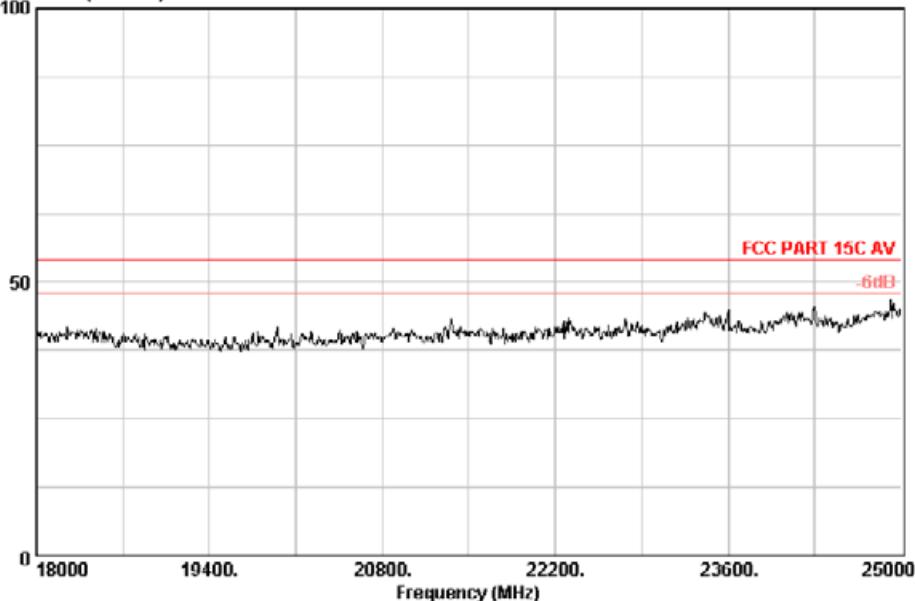
Site no. : 3m Chamber Data no. : 93  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH6:2437MHz Tx  
Memo :



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Data: 91 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)

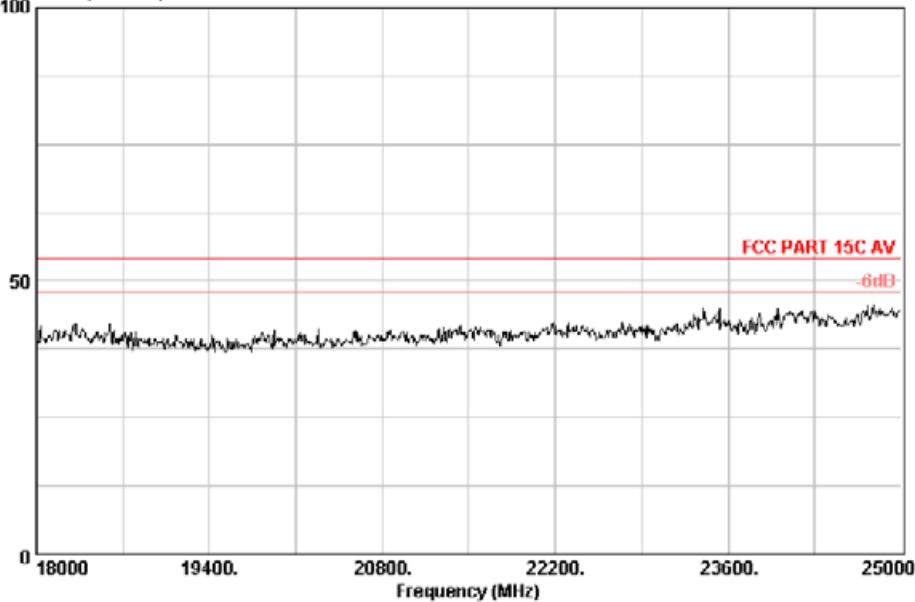
Level (dBuV/m) Date: 2008-03-28



Site no. : 3m Chamber Data no. : 91  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH11:2462MHz Tx  
Memo :

Data: 92 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)

Level (dBuV/m) Date: 2008-03-28

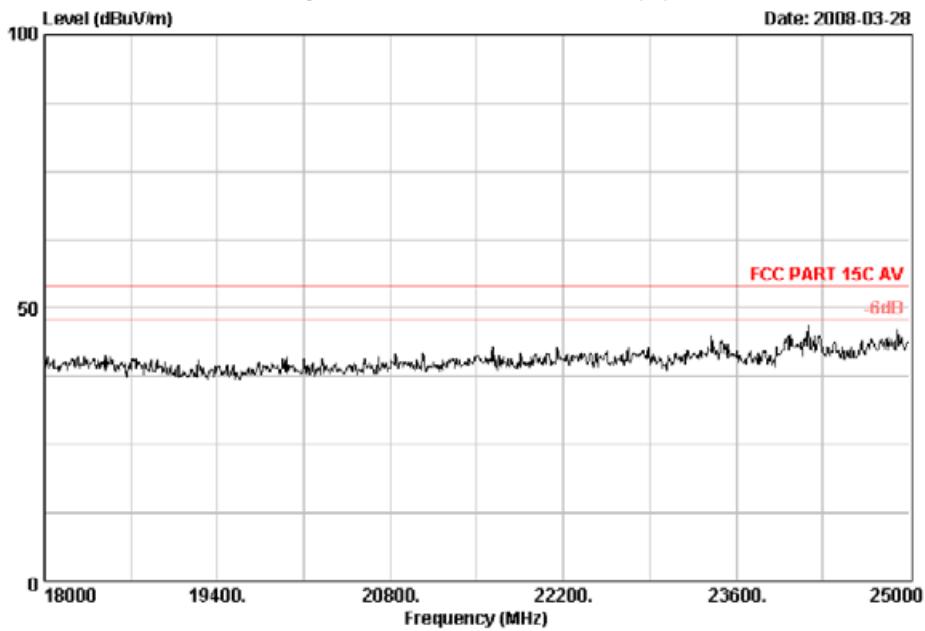


Site no. : 3m Chamber Data no. : 92  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11b CH11:2462MHz Tx  
Memo :



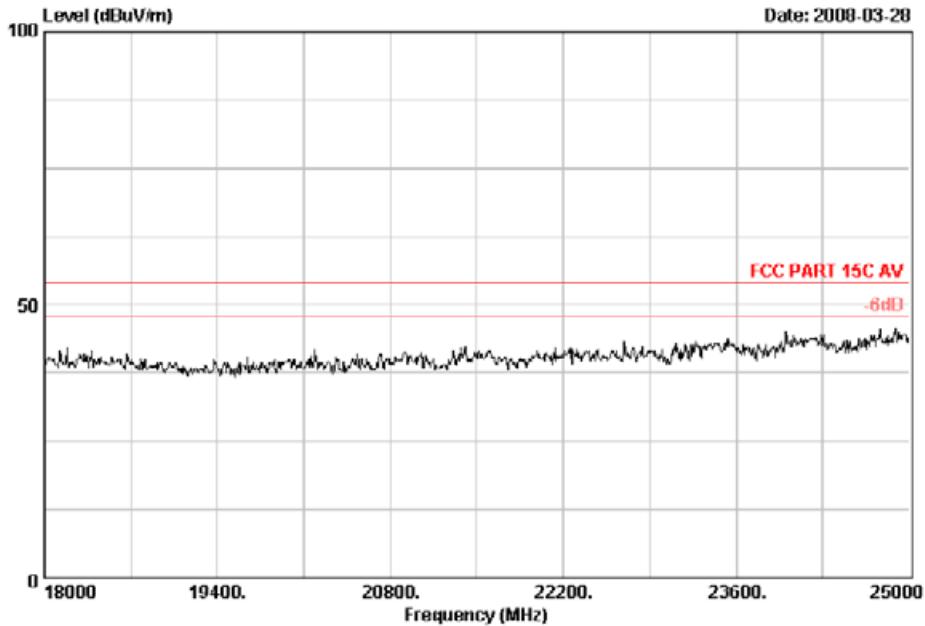
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Data: 86 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)



Site no. : 3m Chamber Data no. : 86  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11g CH1:2412MHz Tx  
Memo :

Data: 85 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)

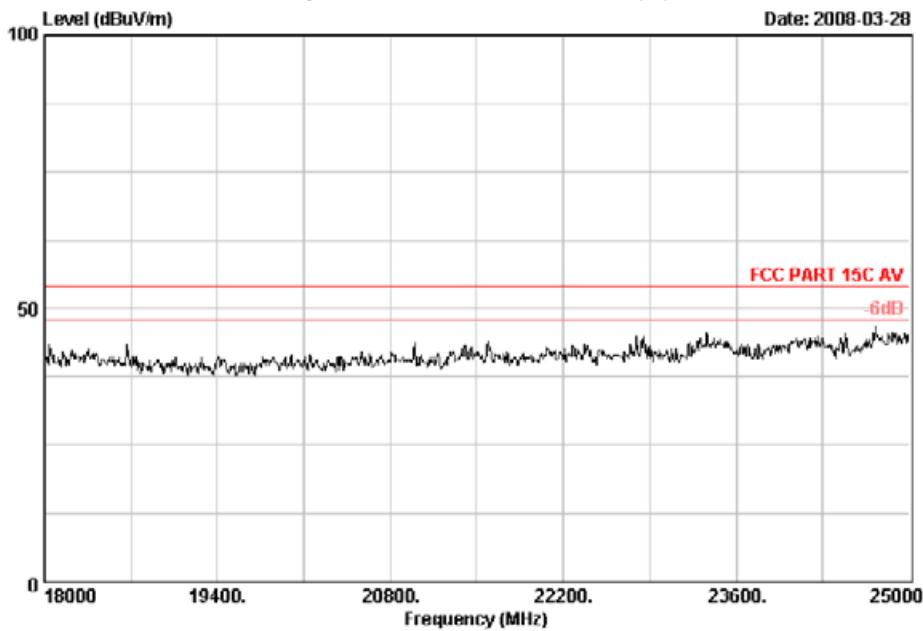


Site no. : 3m Chamber Data no. : 85  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11g CH1:2412MHz Tx  
Memo :



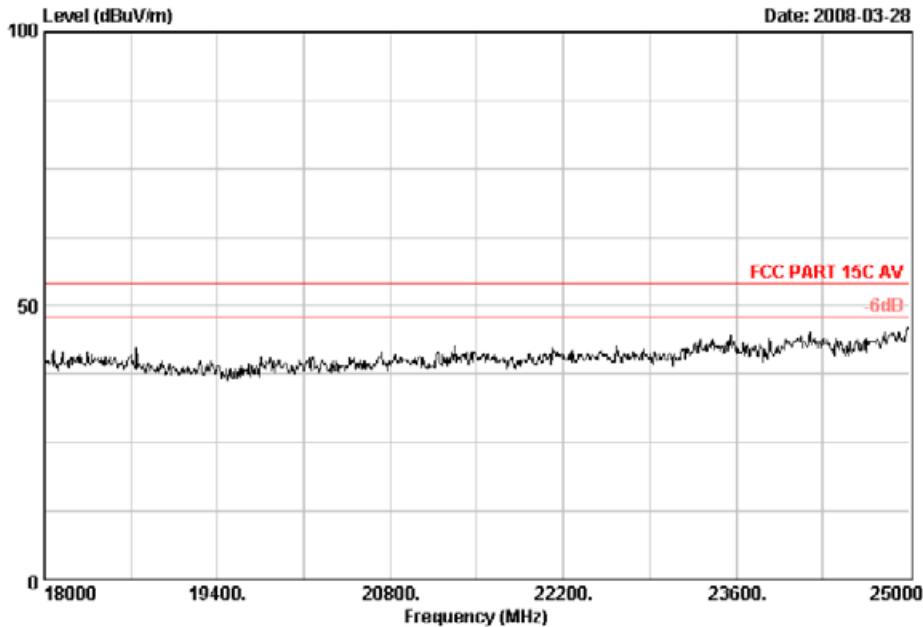
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Data: 87 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)



Site no. : 3m Chamber Data no. : 87  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11g CH6:2437MHz Tx  
Memo :

Data: 88 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)

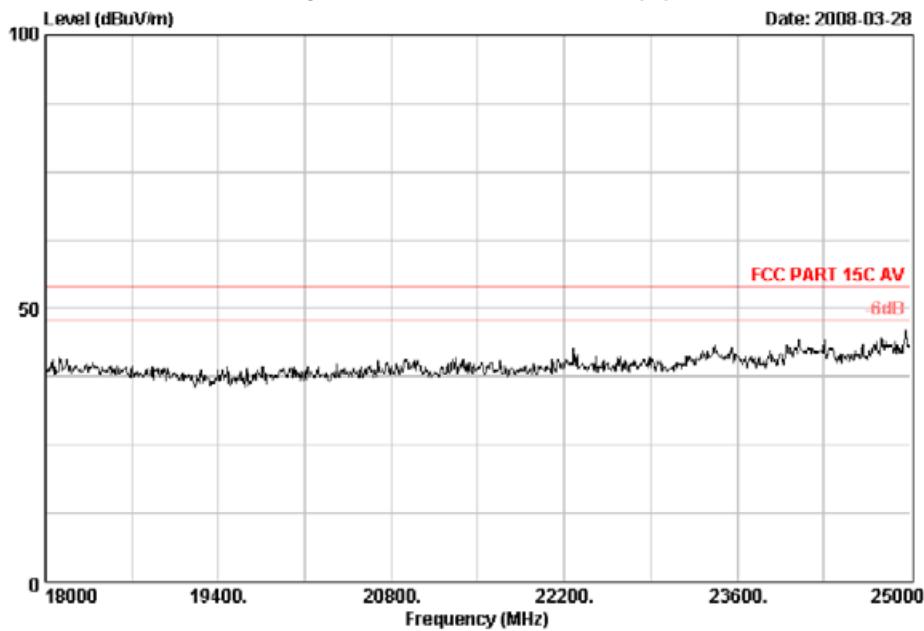


Site no. : 3m Chamber Data no. : 88  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11g CH6:2437MHz Tx  
Memo :



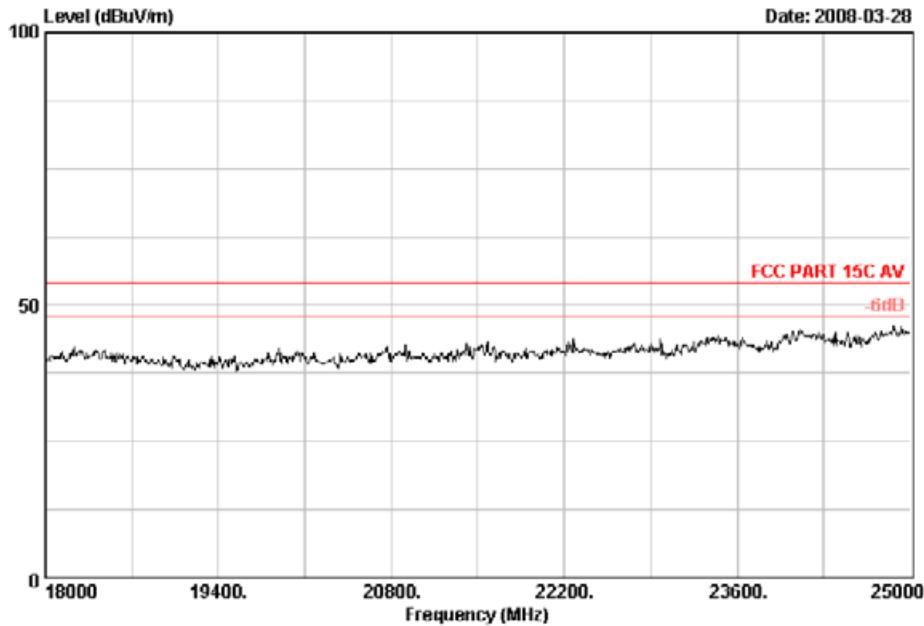
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Data: 90 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)



Site no. : 3m Chamber Data no. : 90  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11g CH11:2462MHz Tx  
Memo :

Data: 89 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)

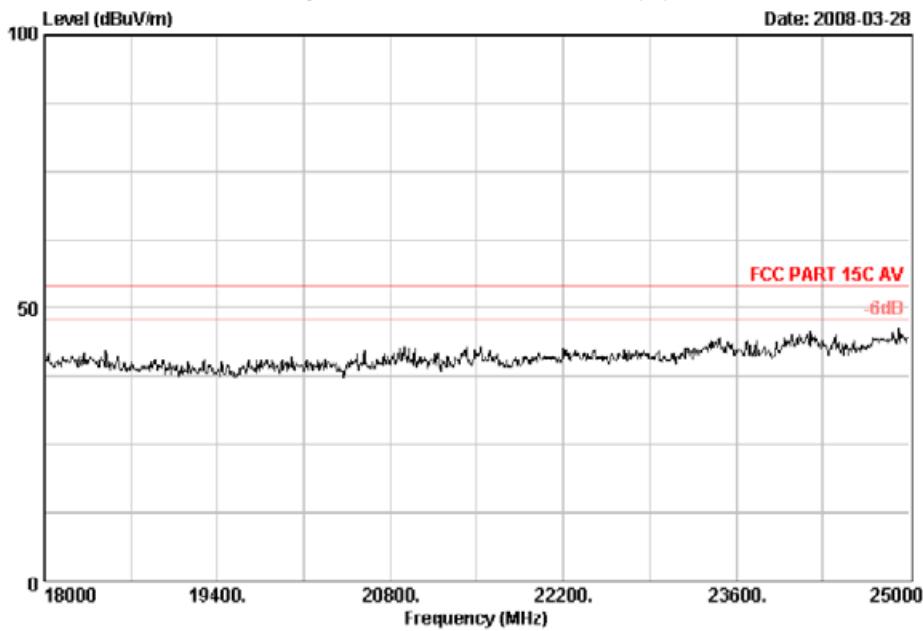


Site no. : 3m Chamber Data no. : 89  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11g CH11:2462MHz Tx  
Memo :



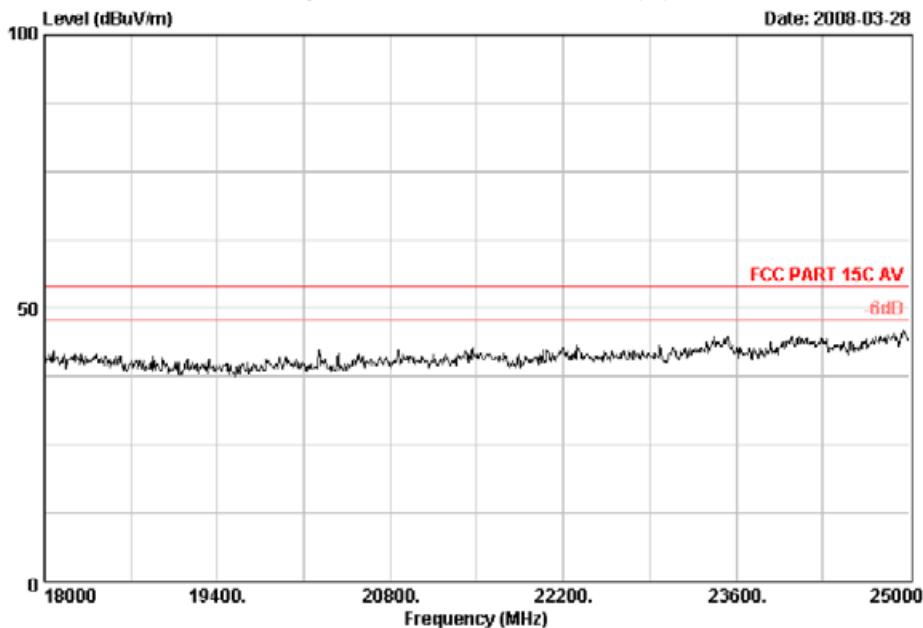
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Postcode:518057

Data: 83 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)



Site no. : 3m Chamber Data no. : 83  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH1:2412MHz Tx  
Memo : HT20

Data: 84 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)

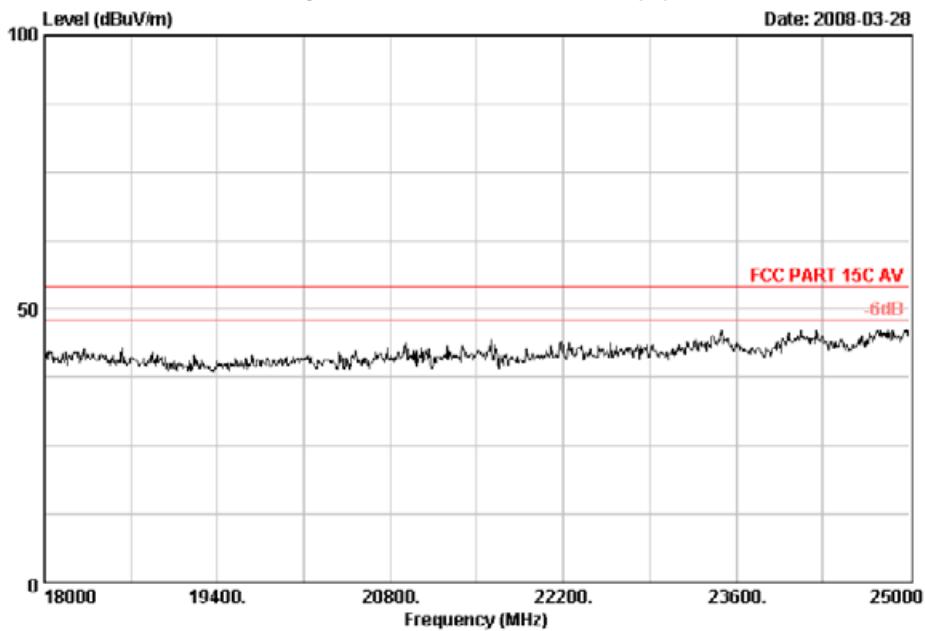


Site no. : 3m Chamber Data no. : 84  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH1:2412MHz Tx  
Memo : HT20



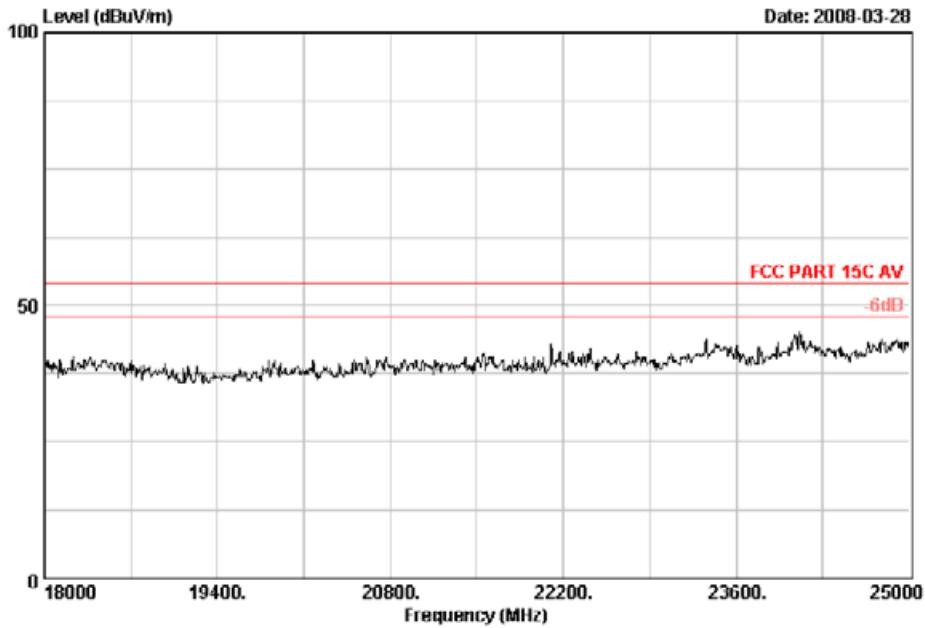
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Postcode:518057

Data: 82 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)



Site no. : 3m Chamber Data no. : 82  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH6:2437MHz Tx  
Memo : HT20

Data: 81 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)



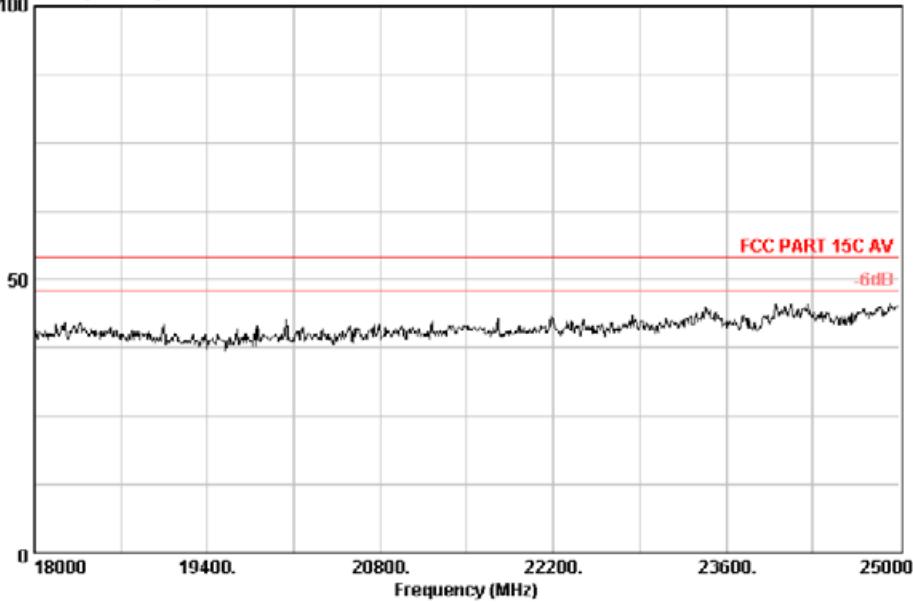
Site no. : 3m Chamber Data no. : 81  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH6:2437MHz Tx  
Memo : HT20



No.6 Ke Feng Road,B1:ck 52,  
ShenZhen Science & Industry Park  
Noutou,ShenZhen,GuangDong,China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
Postcode:518057

Data: 79 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)

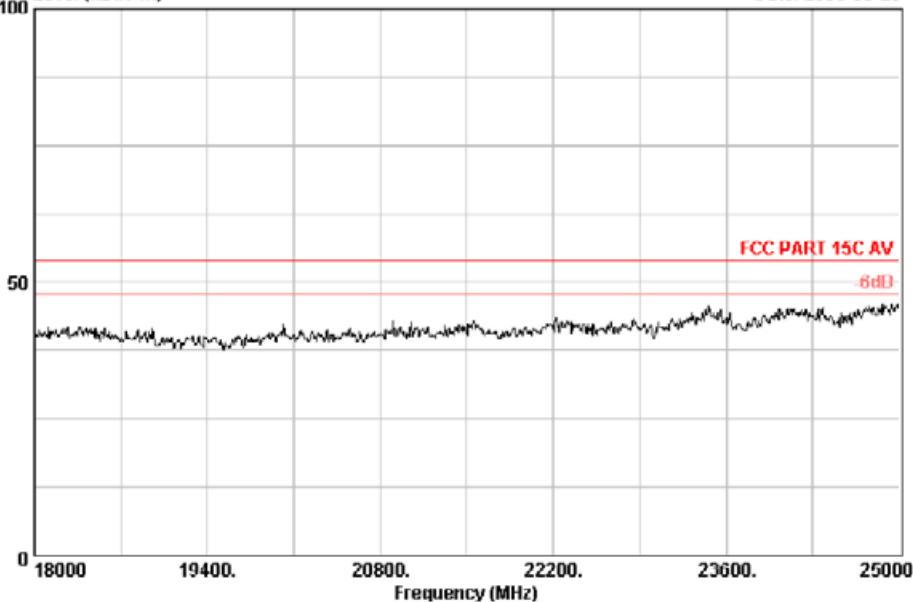
Level (dBuV/m) Date: 2008-03-28



Site no. : 3m Chamber Data no. : 79  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH11:2462MHz Tx  
Memo : HT20

Data: 80 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)

Level (dBuV/m) Date: 2008-03-28



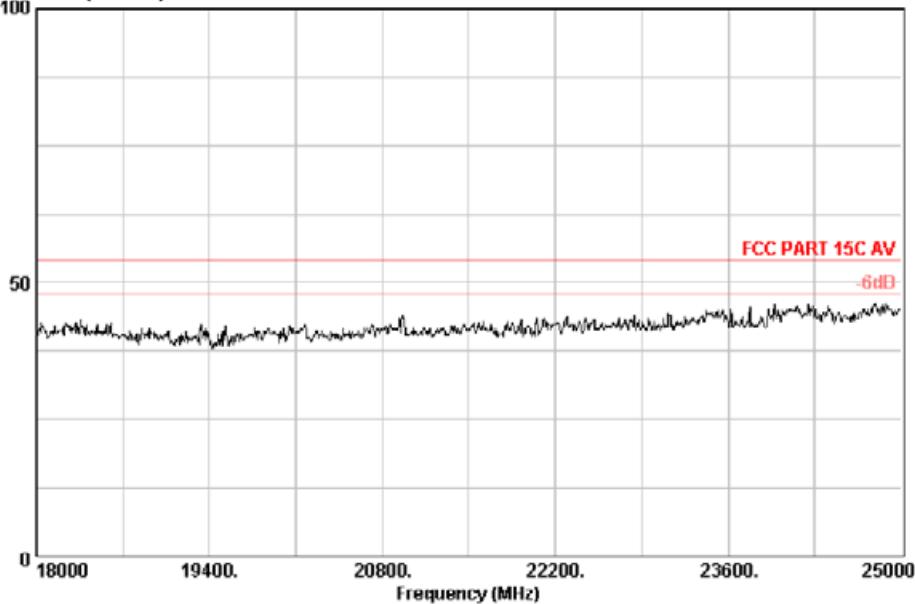
Site no. : 3m Chamber Data no. : 80  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH11:2462MHz Tx  
Memo : HT20



No.6 Ke Feng Road,B1:ck 52,  
ShenZhen Science & Industry Park  
Noutou,ShenZhen,GuangDong,China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
Postcode:518057

Data: 74 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)

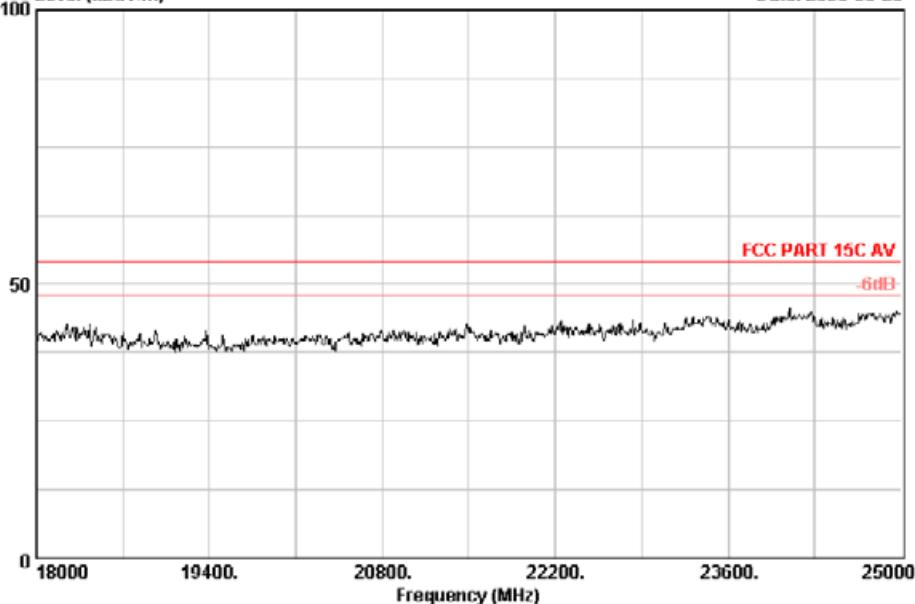
Level (dBuV/m) Date: 2008-03-28



Site no. : 3m Chamber Data no. : 74  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH1:2422MHz Tx  
Memo : HT40

Data: 73 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)

Level (dBuV/m) Date: 2008-03-28



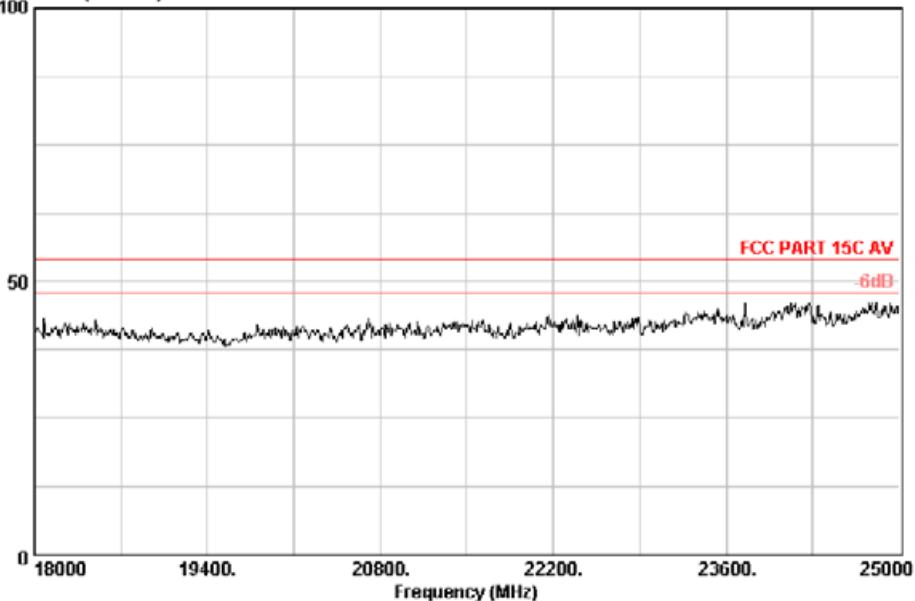
Site no. : 3m Chamber Data no. : 73  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH1:2422MHz Tx  
Memo : HT40



No.6 Ke Feng Road,B1:ck 52,  
ShenZhen Science & Industry Park  
Noutou,ShenZhen,GuangDong,China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
Postcode:518057

Data: 75 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)

Level (dBuV/m) Date: 2008-03-28



Site no. : 3m Chamber

Data no. : 75

Dis. / Ant. : 3m

Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23°C/54%

Engineer : Jamy

EUT : Wireless N Route H/N:TL-WR841ND

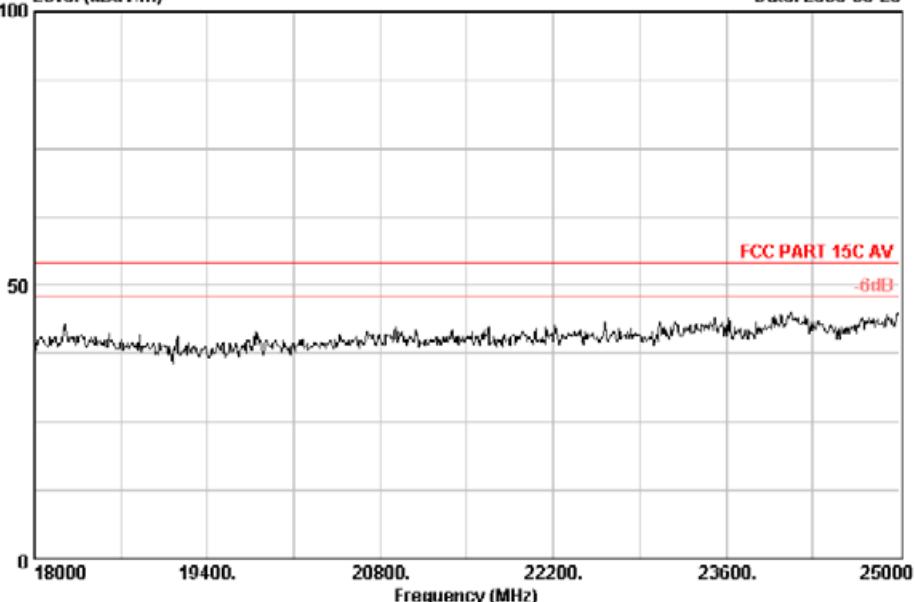
Power Rating : DC 12 V From adapter 120V/60Hz

Test Mode : IEEE802.11n CH4:2437MHz Tx

Memo : HT40

Data: 76 File: D:\2008 report\data\T\TP-LINK\TL-WR841ND.EMI (96)

Level (dBuV/m) Date: 2008-03-28



Site no. : 3m Chamber

Data no. : 76

Dis. / Ant. : 3m

Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23°C/54%

Engineer : Jamy

EUT : Wireless N Route H/N:TL-WR841ND

Power Rating : DC 12 V From adapter 120V/60Hz

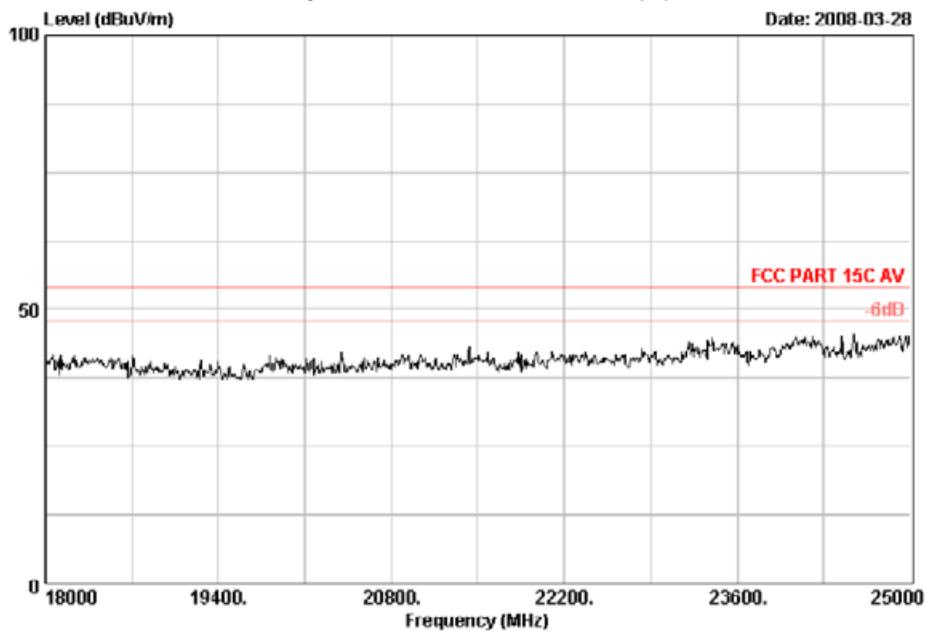
Test Mode : IEEE802.11n CH4:2437MHz Tx

Memo : HT40



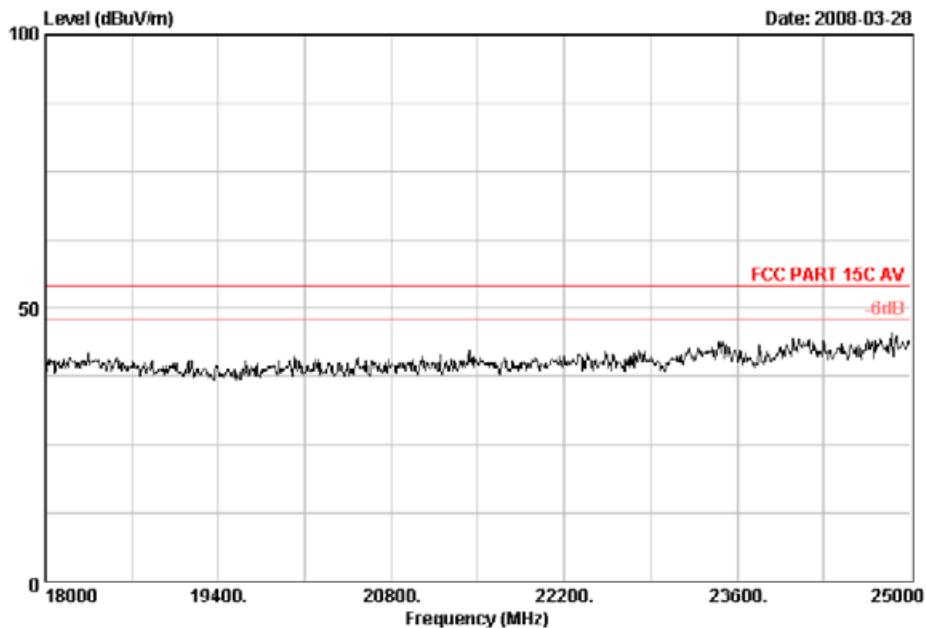
No.6 Ke Feng Road,B1:ck 52,  
ShenZhen Science & Industry Park  
Noutou,ShenZhen,GuangDong,China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
Postcode:518057

Data: 78 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)



Site no. : 3m Chamber Data no. : 78  
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH7:2452MHz Tx  
Memo : HT40

Data: 77 File: D:\2008 report\data\TTP-LINK\TL-WR841ND.EMI (96)

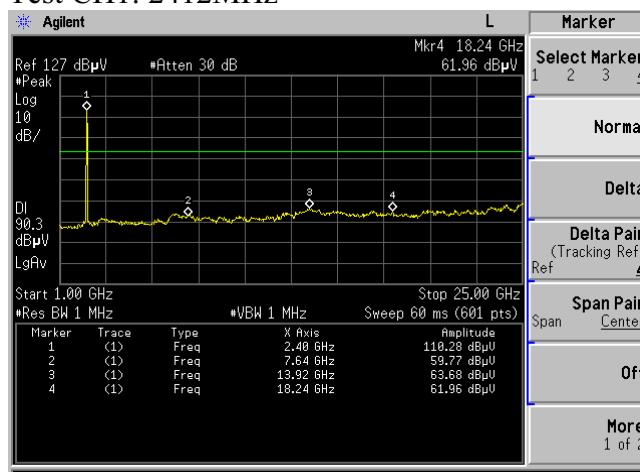


Site no. : 3m Chamber Data no. : 77  
Dis. / Ant. : 3m Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route H/N:TL-WR841ND  
Power Rating : DC 12 V From adapter 120V/60Hz  
Test Mode : IEEE802.11n CH7:2452MHz Tx  
Memo : HT40

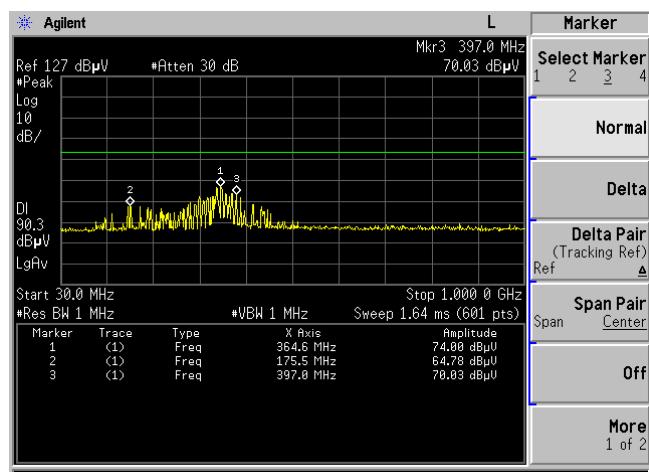
**Conducted emission test data:**

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz

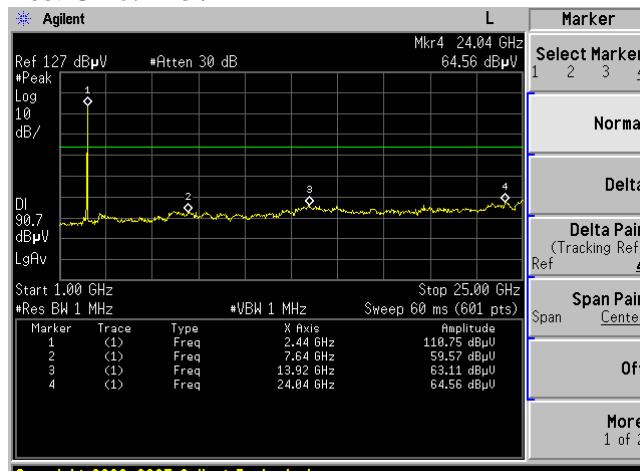


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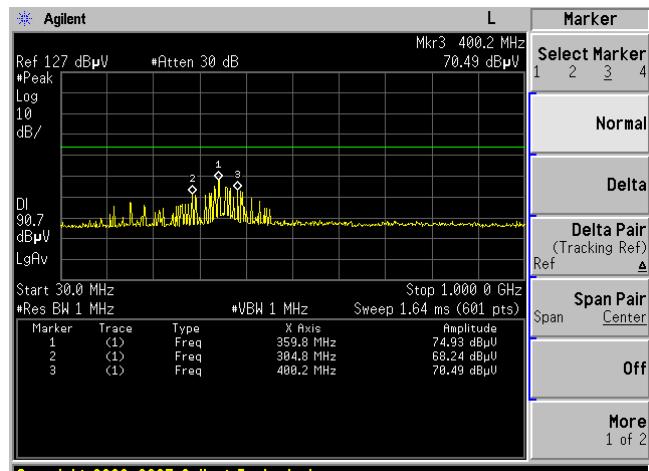


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Test CH6: 2437MHz

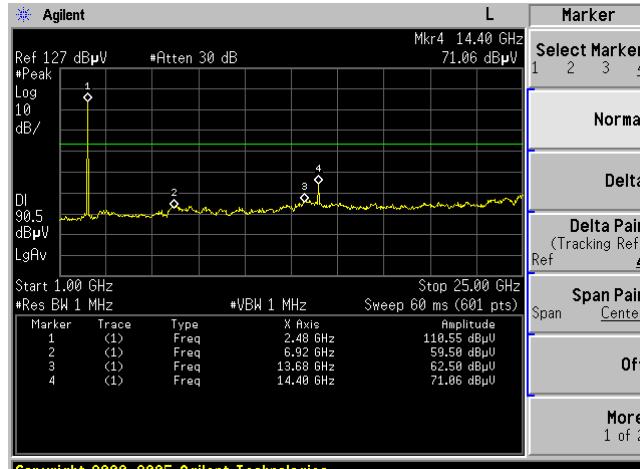


Copyright 2000-2005 Agilent Technologies

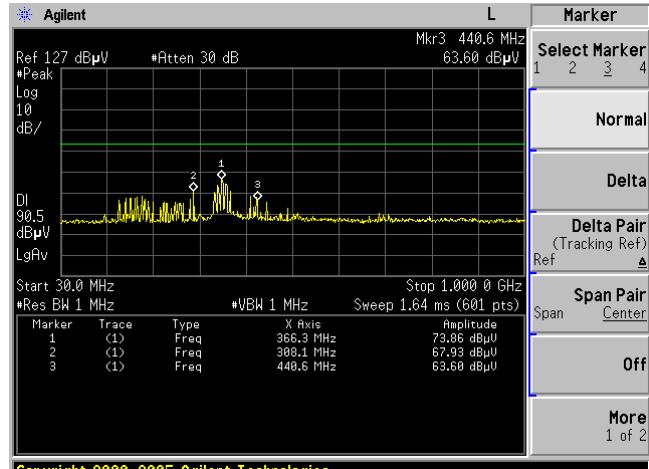


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Test CH11: 2462MHz



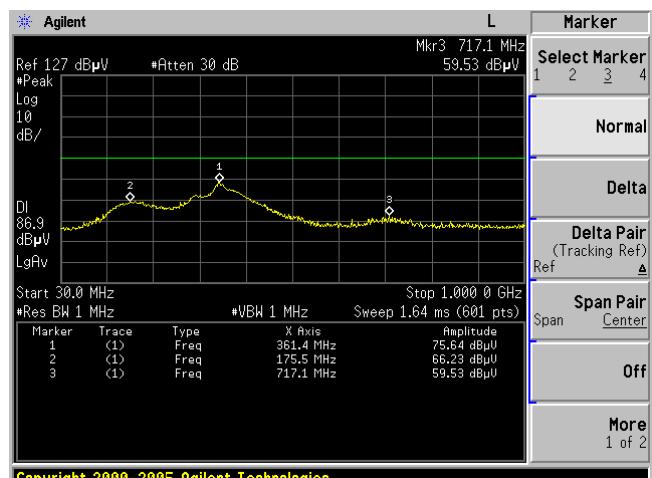
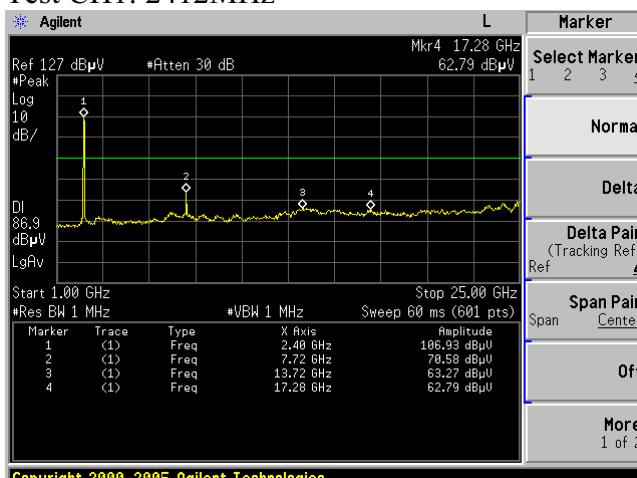
Copyright 2000-2005 Agilent Technologies



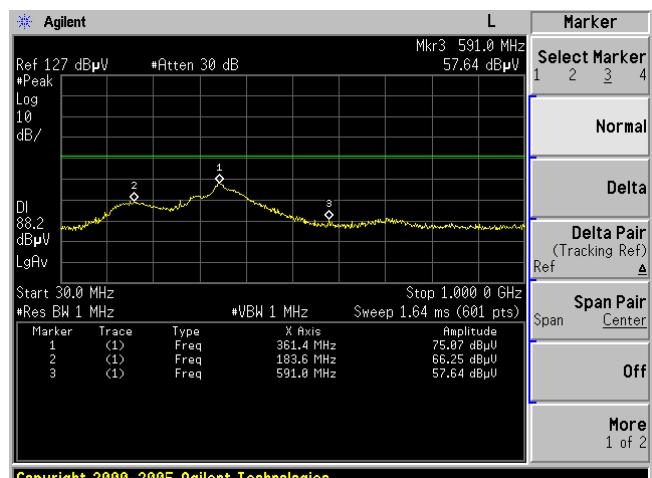
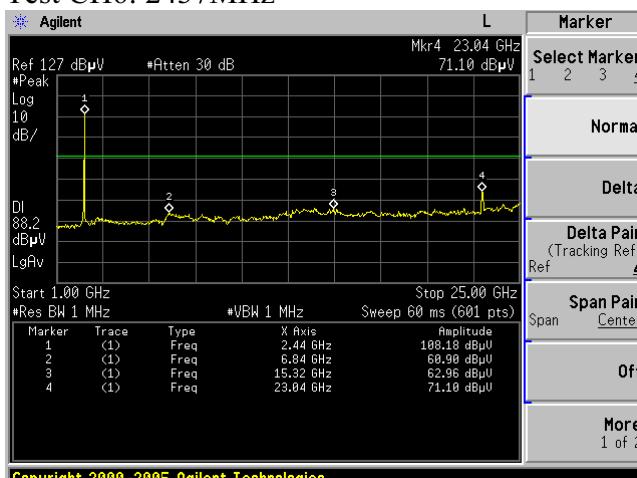
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## Test Mode: IEEE 802.11g TX

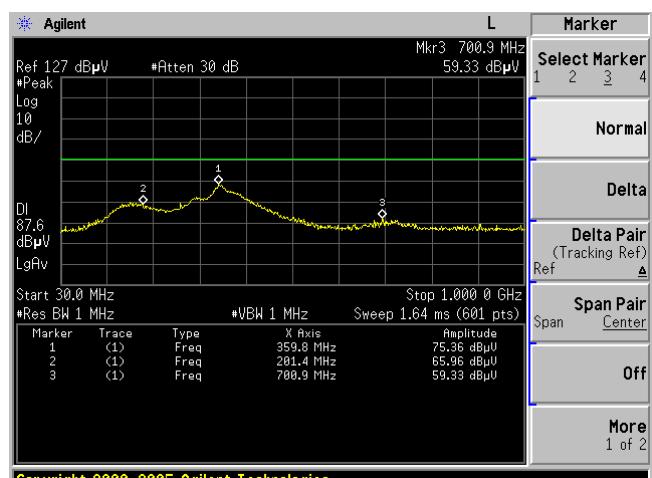
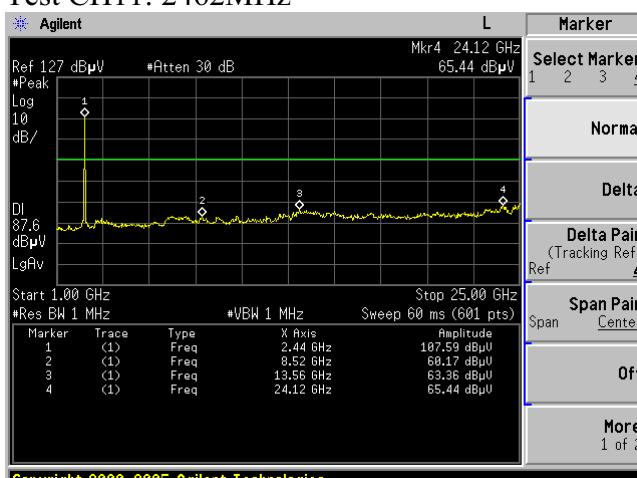
### Test CH1: 2412MHz



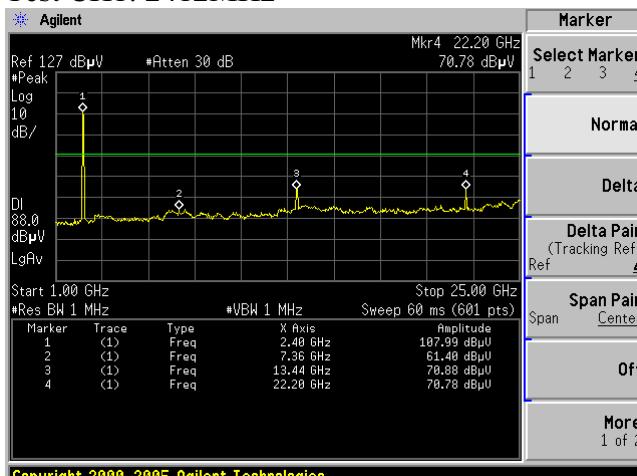
### Test CH6: 2437MHz



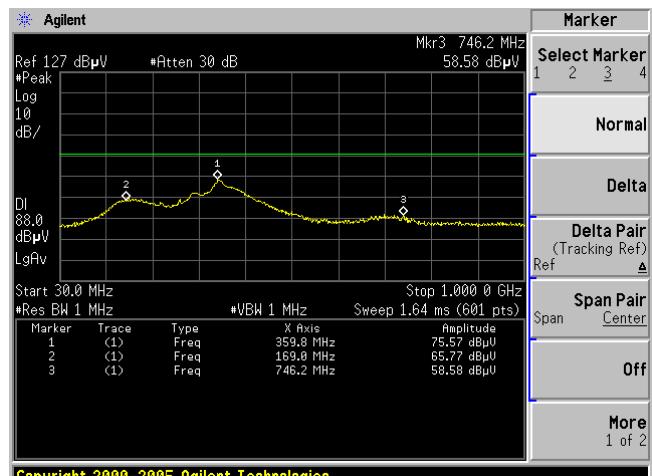
### Test CH11: 2462MHz



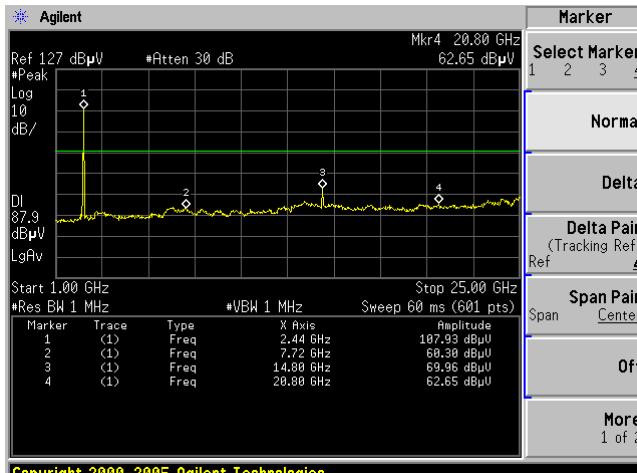
**Test Mode: IEEE 802.11n TX (HT20)**  
**Test CH1: 2412MHz**



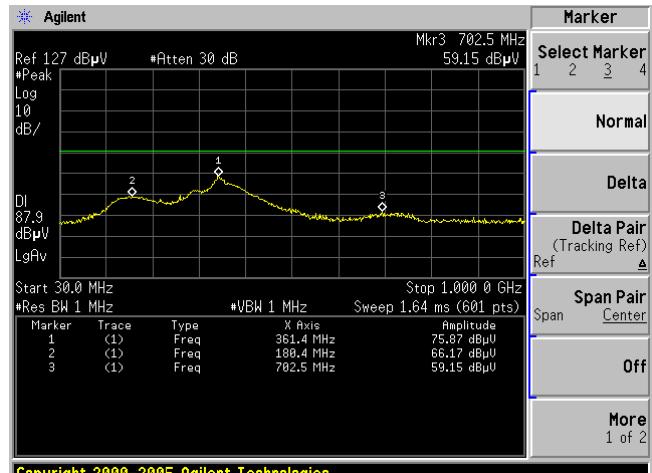
Copyright 2000-2005 Agilent Technologies



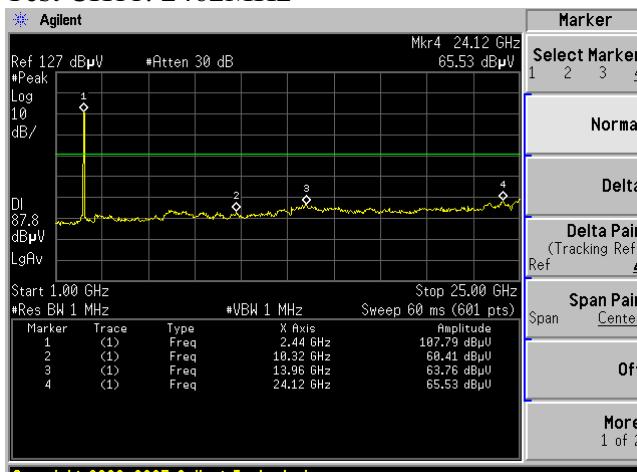
Copyright 2000-2005 Agilent Technologies

**Test CH6: 2437MHz**

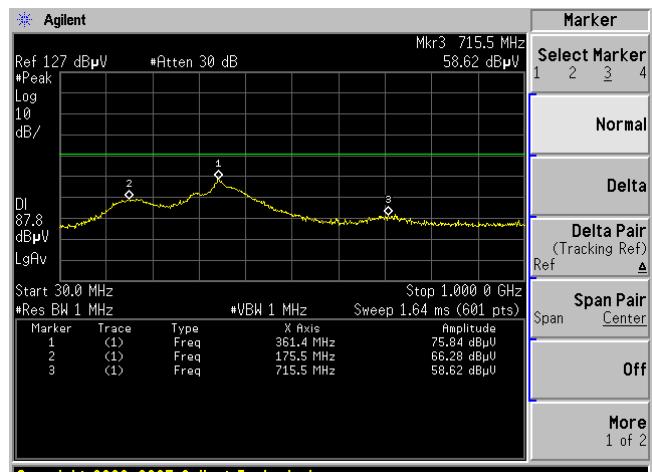
Copyright 2000-2005 Agilent Technologies



Copyright 2000-2005 Agilent Technologies

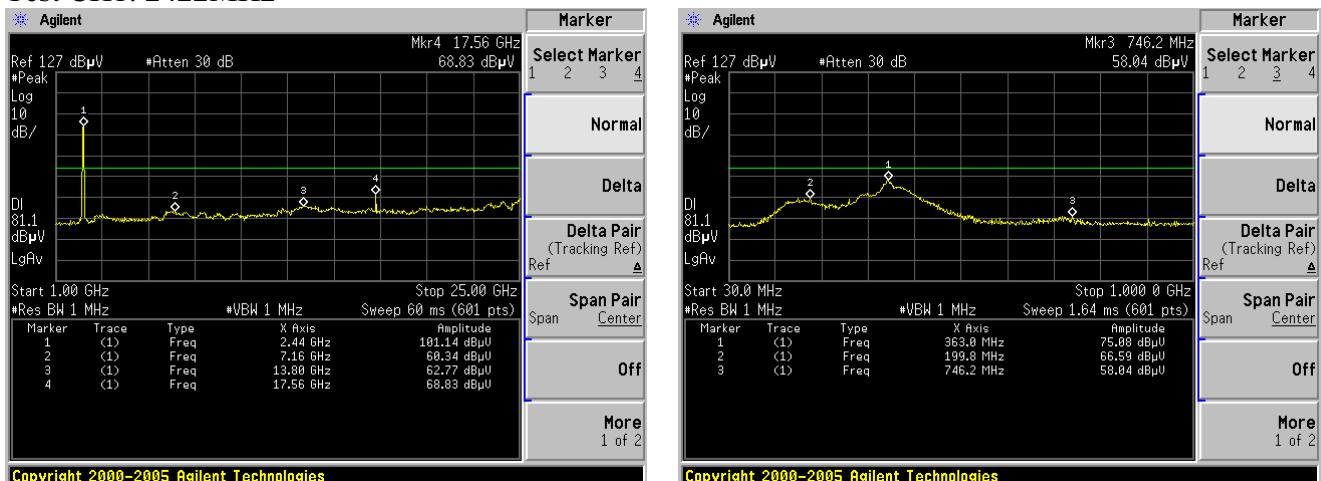
**Test CH11: 2462MHz**

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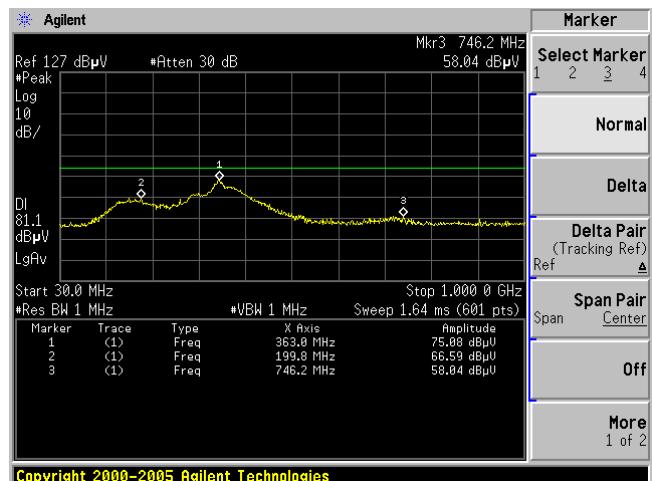


Copyright 2000-2005 Agilent Technologies

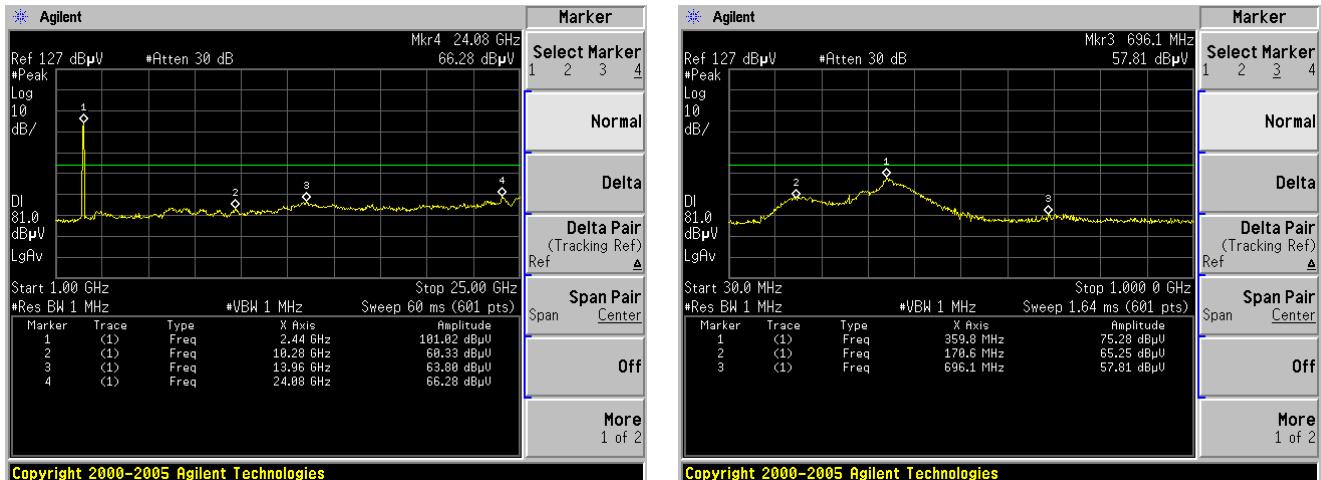
**Test Mode: IEEE 802.11n TX (HT40)**  
**Test CH1: 2422MHz**



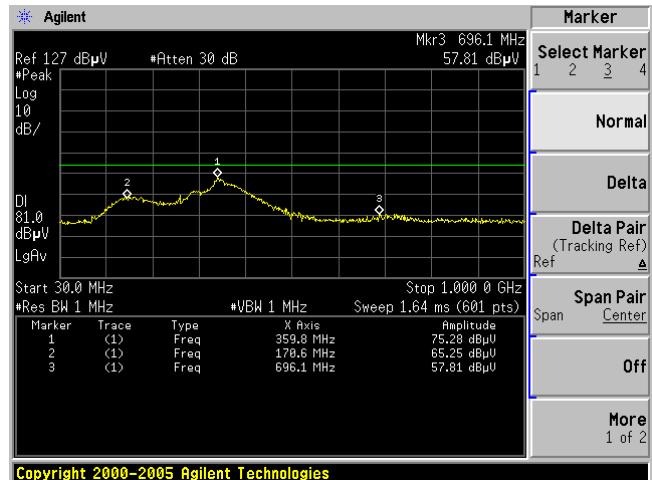
Copyright 2000-2005 Agilent Technologies



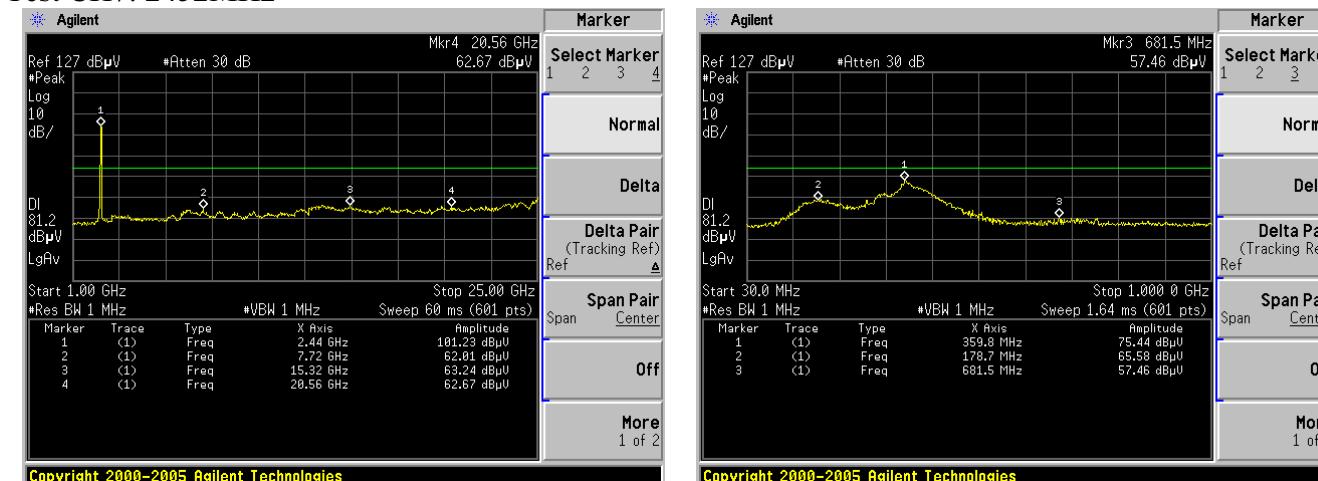
Copyright 2000-2005 Agilent Technologies

**Test CH4: 2437MHz**

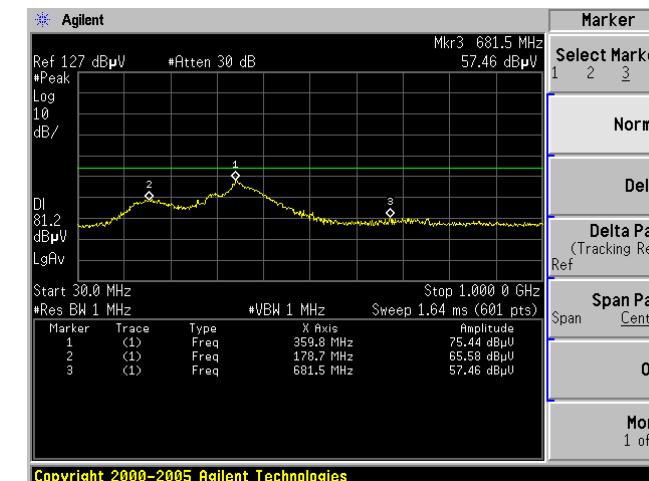
Copyright 2000-2005 Agilent Technologies



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**Test CH7: 2452MHz**

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## 5. 6dB Bandwidth Test

### 5.1. Test Equipment

| Item | Equipment         | Manufacturer | Model No. | Serial No. | Last Cal.  | Cal. Interval |
|------|-------------------|--------------|-----------|------------|------------|---------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300459 | May,11, 07 | 1 Year        |
| 2    | RF Cable          | MIYAZAKI     | 8D-FB     | NO 3       | May,11,07  | 1 Year        |

### 5.2. Test Information

|                      |   |
|----------------------|---|
| EUT:                 | Wireless N Router   |
| M/N:                 | TL-WR841ND  |
| Test Date:           | Mar.26, 2008  |
| Ambient Temperature: | 23°C  |
| Relative Humidity:   | 60%   |
| Test standard:       | FCC PART 15C: 15.247  |
| Test mode:           | IEEE 802.11b TX / IEEE 802.11g TX /<br>IEEE 802.11n TX (HT20) / IEEE 802.11n TX (HT40)                        |
| Test Frequency:      | 11b,11g,11n HT20: CH1: 2412MHz CH6: 2437MHz CH11: 2462MHz<br>11n HT40: CH1: 2422MHz CH4: 2437MHz CH7: 2452MHz |
| Tested By:           | Jamy  |

### 5.3. Test Procedure

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

## 5.4. Test Results

### Test Mode: IEEE 802.11b TX

| CH | 6dB Bandwidth (MHz) | Limit | Conclusion |
|----|---------------------|-------|------------|
| 1  | 12.00               | >500  | PASS       |
| 6  | 13.07               | >500  | PASS       |
| 11 | 13.07               | >500  | PASS       |

### Test Mode: IEEE 802.11g TX

| CH | 6dB Bandwidth (MHz) | Limit | Conclusion |
|----|---------------------|-------|------------|
| 1  | 16.53               | >500  | PASS       |
| 6  | 16.53               | >500  | PASS       |
| 11 | 16.53               | >500  | PASS       |

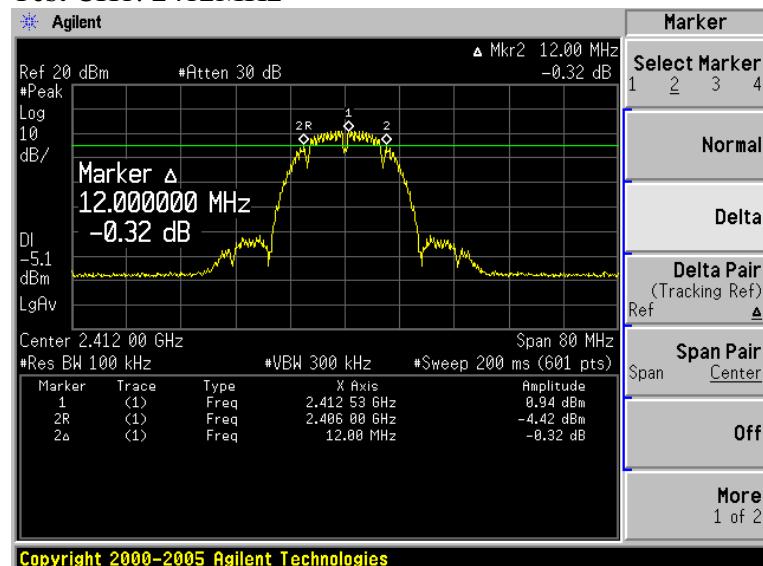
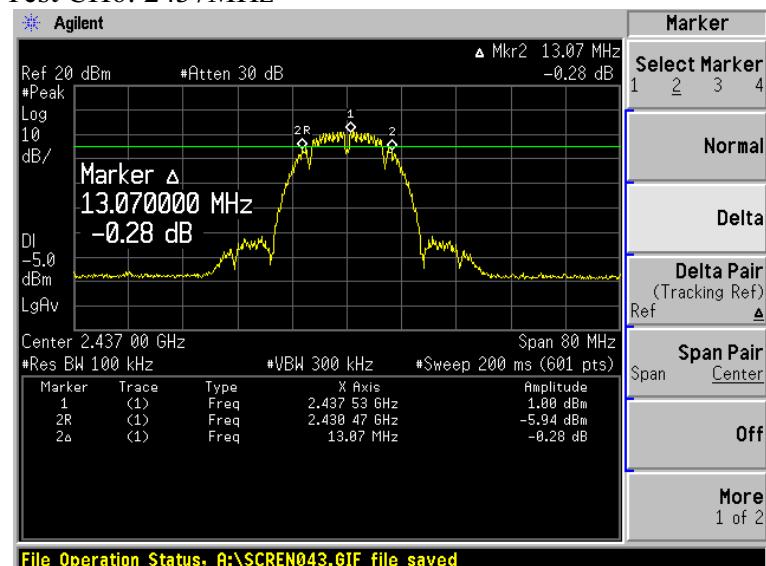
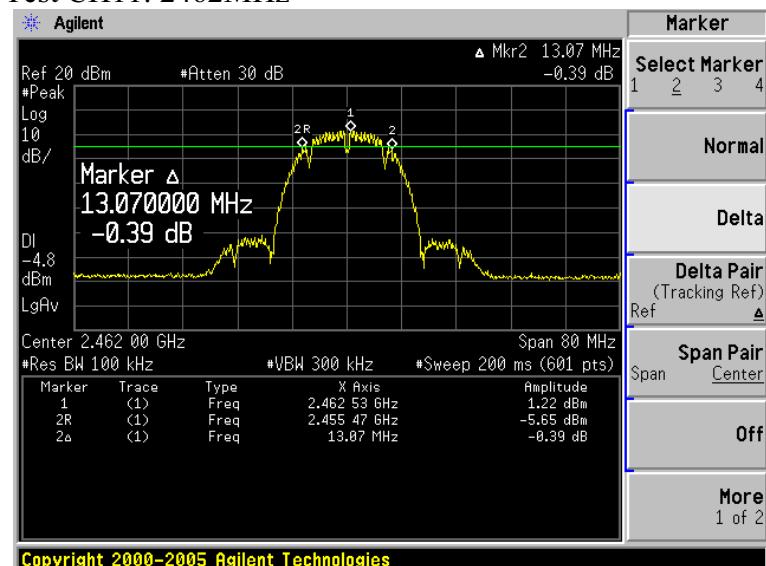
### Test Mode: IEEE 802.11n TX (HT20)

| CH | 6dB Bandwidth (MHz) | Limit | Conclusion |
|----|---------------------|-------|------------|
| 1  | 17.87               | >500  | PASS       |
| 6  | 17.87               | >500  | PASS       |
| 11 | 17.87               | >500  | PASS       |

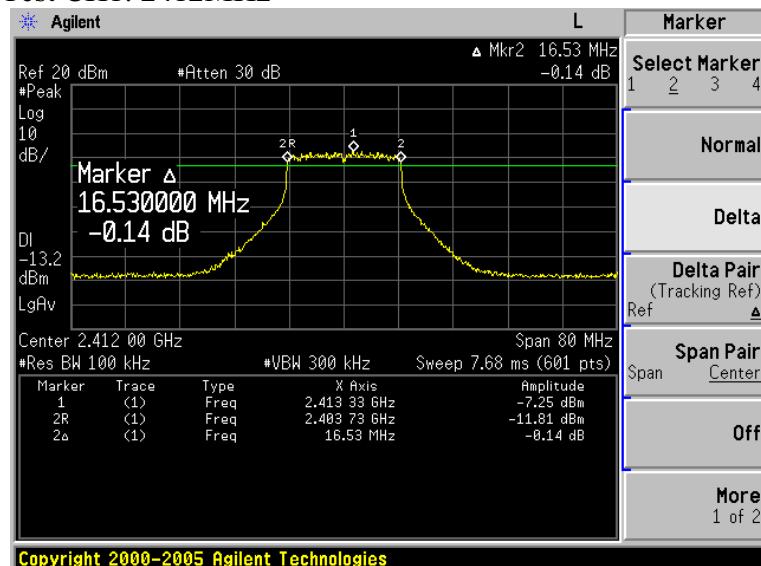
### Test Mode: IEEE 802.11n TX (HT40)

| CH | 6dB Bandwidth (MHz) | Limit | Conclusion |
|----|---------------------|-------|------------|
| 1  | 36.53               | >500  | PASS       |
| 4  | 36.53               | >500  | PASS       |
| 7  | 36.53               | >500  | PASS       |

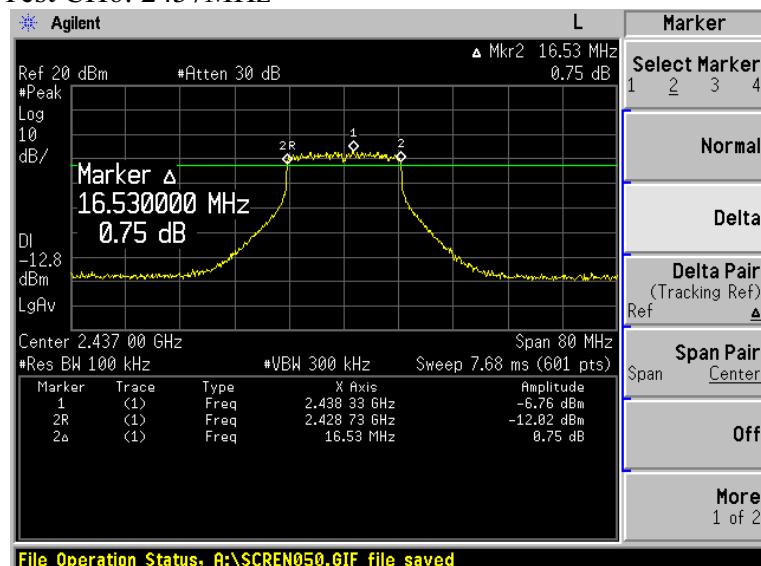
**Test Mode: IEEE 802.11b TX**  
**Test CH1: 2412MHz**

**Test CH6: 2437MHz****Test CH11: 2462MHz**

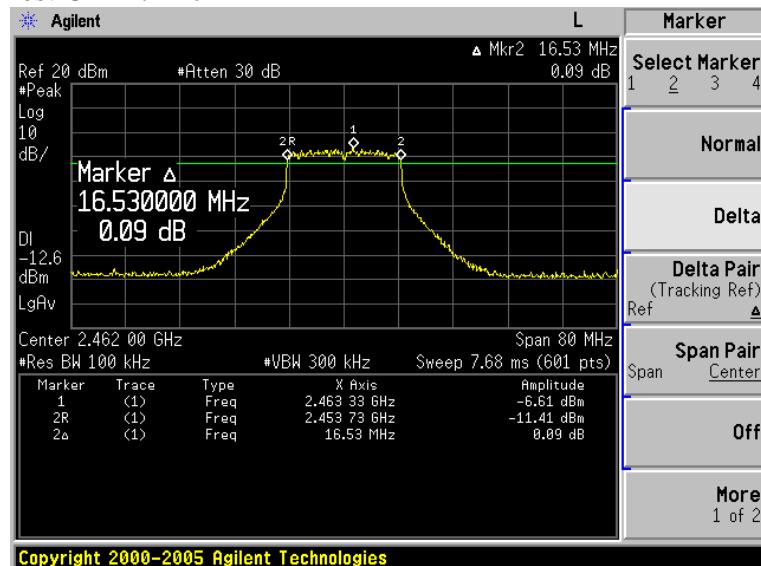
Test Mode: IEEE 802.11g TX  
 Test CH1: 2412MHz



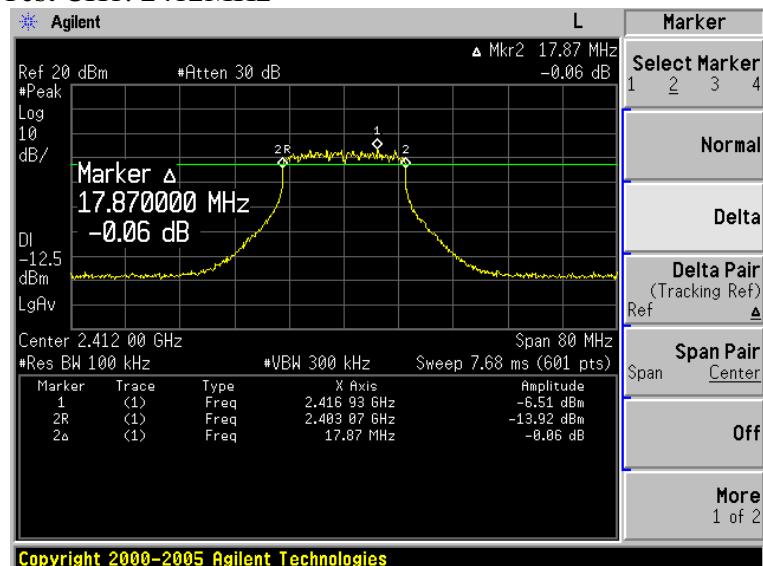
## Test CH6: 2437MHz



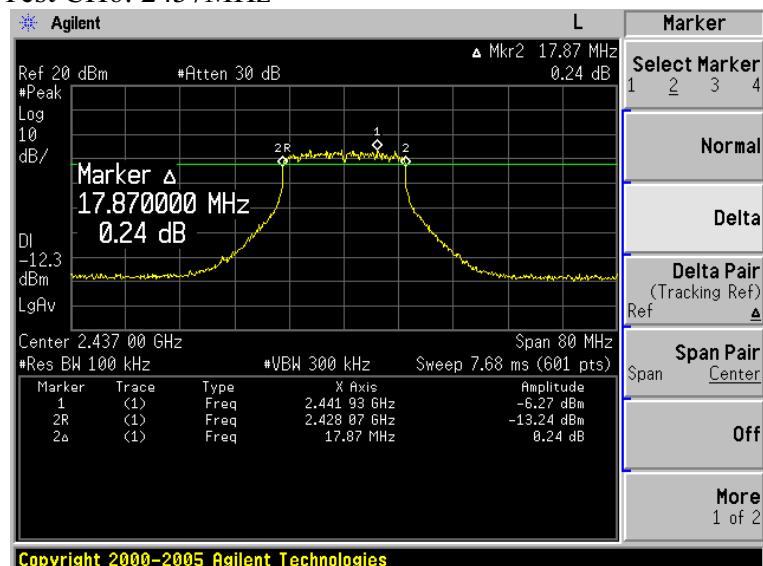
## Test CH11: 2462MHz



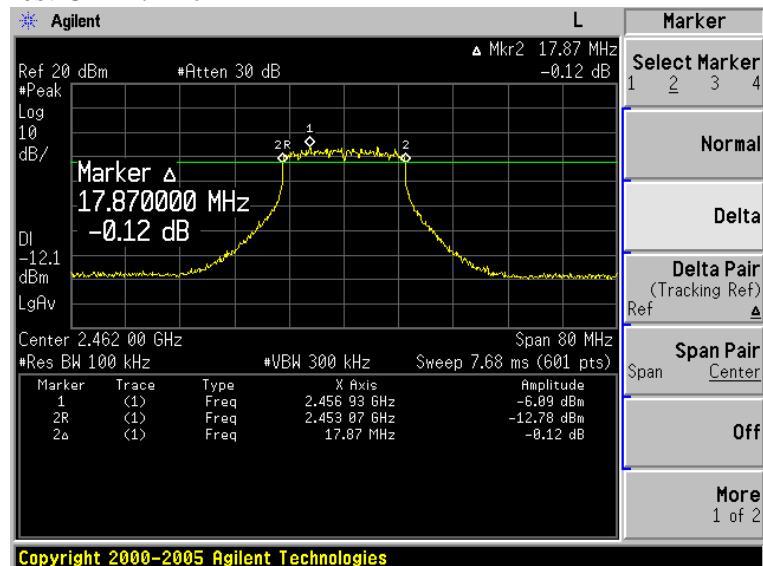
Test Mode: IEEE 802.11n TX (HT20)  
 Test CH1: 2412MHz



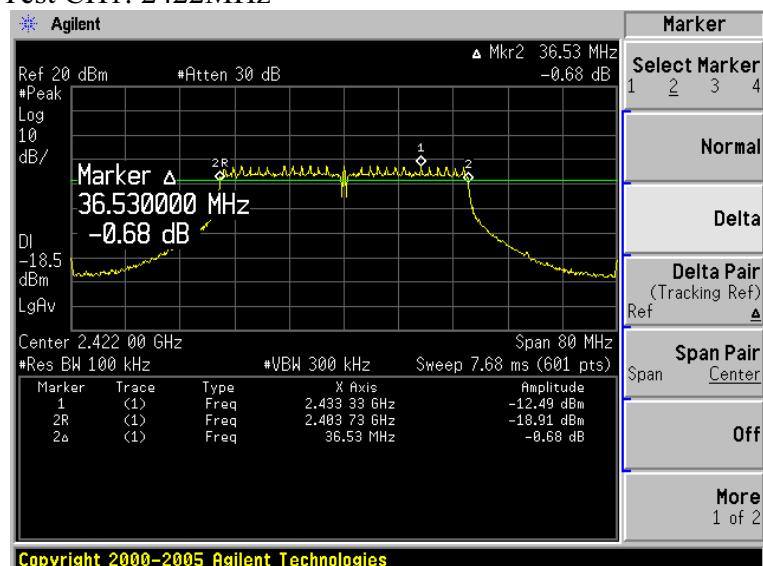
## Test CH6: 2437MHz



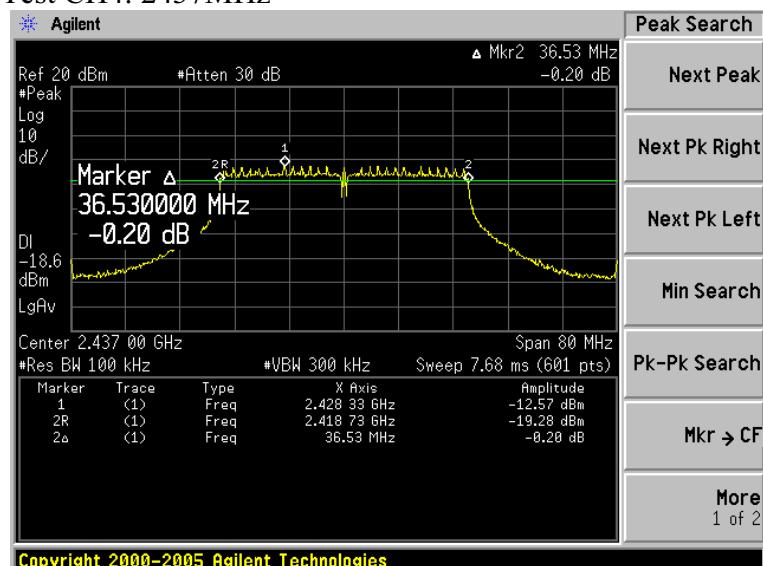
## Test CH11: 2462MHz



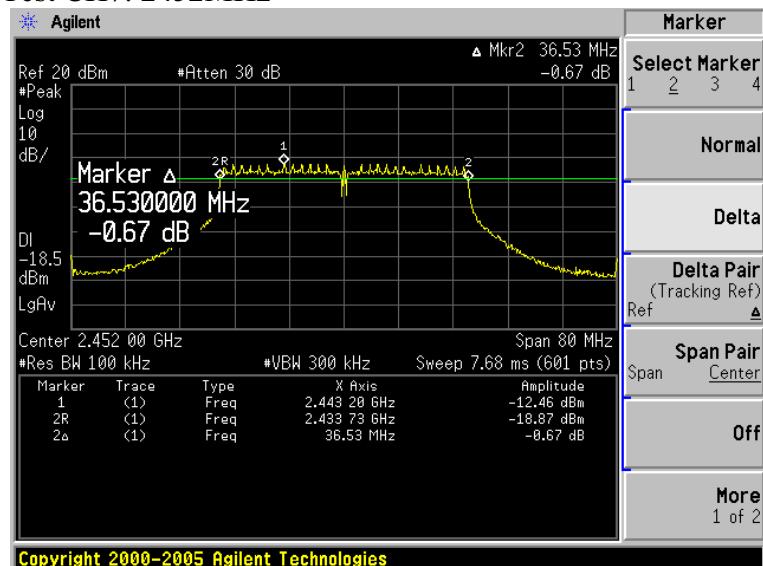
Test Mode: IEEE 802.11n TX (HT40)  
 Test CH1: 2422MHz



## Test CH4: 2437MHz



## Test CH7: 2452MHz



## 6. OUTPUT POWER TEST

### 6.1. Test Equipment

| Item | Equipment         | Manufacturer | Model No. | Serial No. | Last Cal.  | Cal. Interval |
|------|-------------------|--------------|-----------|------------|------------|---------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300459 | May,11, 07 | 1 Year        |
| 2    | RF Cable          | MIYAZAKI     | 8D-FB     | NO 3       | May,11,07  | 1 Year        |
| 3    | Power meter       | Anritsu      | ML2487    | 6K00002472 | May,11,07  | 1 Year        |
| 4    | Attenuator        | Agilent      | 8491B     | MY39262165 | May.11, 07 | 1 Year        |

### 6.2. Test Information

|                      |   |
|----------------------|---|
| EUT:                 | Wireless N Router   |
| M/N:                 | TL-WR841ND  |
| Ambient Temperature: | 23°C  |
| Relative Humidity:   | 60%   |
| Test standard:       | FCC PART 15C: 15.247  |
| Test mode:           | IEEE 802.11b TX / IEEE 802.11g TX / IEEE 802.11n TX (HT20) / IEEE 802.11n TX (HT40)                           |
| Test Frequency:      | 11b,11g,11n HT20: CH1: 2412MHz CH6: 2437MHz CH11: 2462MHz<br>11n HT40: CH1: 2422MHz CH4: 2437MHz CH7: 2452MHz |
| Tested By:           | Jamy  |

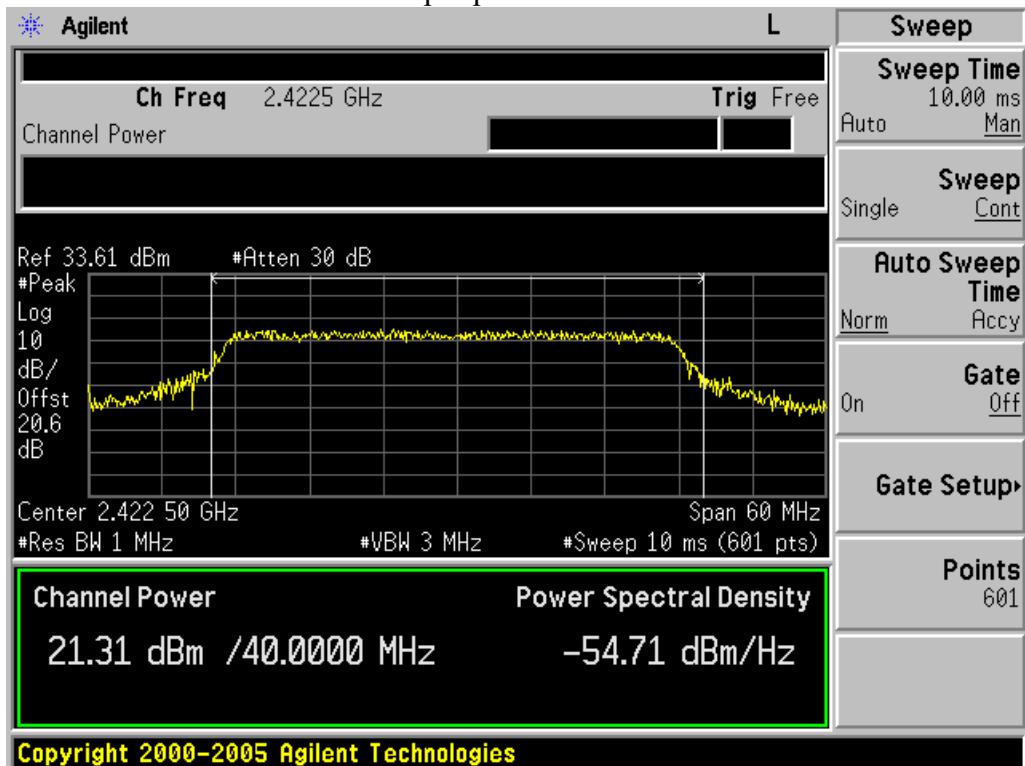
### 6.3. Test Procedure

- 1, For IEEE 802.11b/g and IEEE802.11n HT20 mode, the transmitter output was connected to a power meter, use the power meter to read out the peak out put power.
- 2, For IEEE802.11n HT40 mode the transmitter output was connected to a Spectrum Analyzer through a 20dB Attenuator, and use the channel power measure function of Spectrum Analyzer to read out the peak output power.

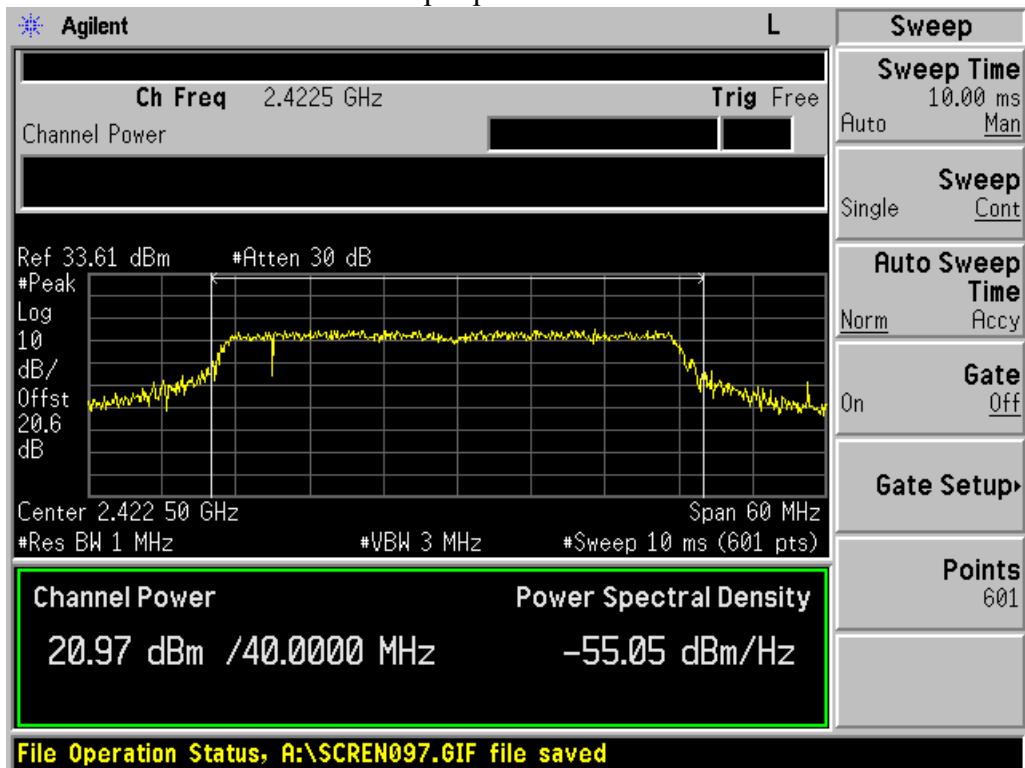
## 6.4. Test Results

| <b>Maximum Peak Conducted Output Power</b>   |                        |                                      |                 |                   |             |
|--|------------------------|--------------------------------------|-----------------|-------------------|-------------|
| EUT: Wireless N Router M/N:TL-WR841ND  |                        |                                      |                 |                   |             |
| Power: DC 12V From adapter 120V/60Hz   |                        |                                      |                 |                   |             |
| Data Rate:11b 1Mbps ; 11g : 6Mbps ; 11n HT20 : 6.5Mbps ; 11n HT40 : 13.5Mbps(Note 1) |                        |                                      |                 |                   |             |
| Ambient Temperature:23 °C  | Relative Humidity: 60% |                                      |                 |                   |             |
| Test date:2008/04/23   | Test site: RF site     | Tested By: Jamy                      |                 |                   |             |
| Cable Loss: 0.6dB Antenna Gain:3dBi  |                        |                                      |                 |                   |             |
| Test CH  | 11b,11g,11n<br>HT20    | CH1:2412MHz CH6:2437MHz CH11:2462MHz |                 |                   |             |
| Test CH  | 11n HT40               | CH1:2422MHz CH4:2437MHz CH7:2452MHz  |                 |                   |             |
| Mode   | CH                     | Chain1                               | Chain2          | Result            |             |
|  |                        | Peak Level(dBm)                      | Peak Level(dBm) | Total Power (dBm) | Limit (dBm) |
| 11b  | CH1                    | 17.74                                | 17.73           | <b>20.75</b>      | 30.00       |
|  | CH6                    | 17.81                                | 17.72           | <b>20.78</b>      | 30.00       |
|  | CH11                   | 18.02                                | 17.74           | <b>20.89</b>      | 30.00       |
| 11g  | CH1                    | 19.57                                | 19.64           | <b>22.62</b>      | 30.00       |
|  | CH6                    | 19.41                                | 19.84           | <b>22.64</b>      | 30.00       |
|  | CH11                   | 19.43                                | 19.69           | <b>22.57</b>      | 30.00       |
| 11n<br>HT20  | CH1                    | 19.67                                | 19.84           | <b>22.77</b>      | 30.00       |
|  | CH6                    | 19.69                                | 19.90           | <b>22.81</b>      | 30.00       |
|  | CH11                   | 19.67                                | 20.07           | <b>22.88</b>      | 30.00       |
| 11n<br>HT40  | CH1                    | 21.31                                | 20.97           | <b>24.15</b>      | 30.00       |
|  | CH4                    | 21.73                                | 20.93           | <b>24.36</b>      | 30.00       |
|  | CH7                    | 21.78                                | 20.85           | <b>24.35</b>      | 30.00       |
| Note1:According Exploratory test, These data rate have the maximum output power      |                        |                                      |                 |                   |             |
| Total power=Chain1 Level +Chain2 Level(Linear)                                       |                        |                                      |                 |                   |             |

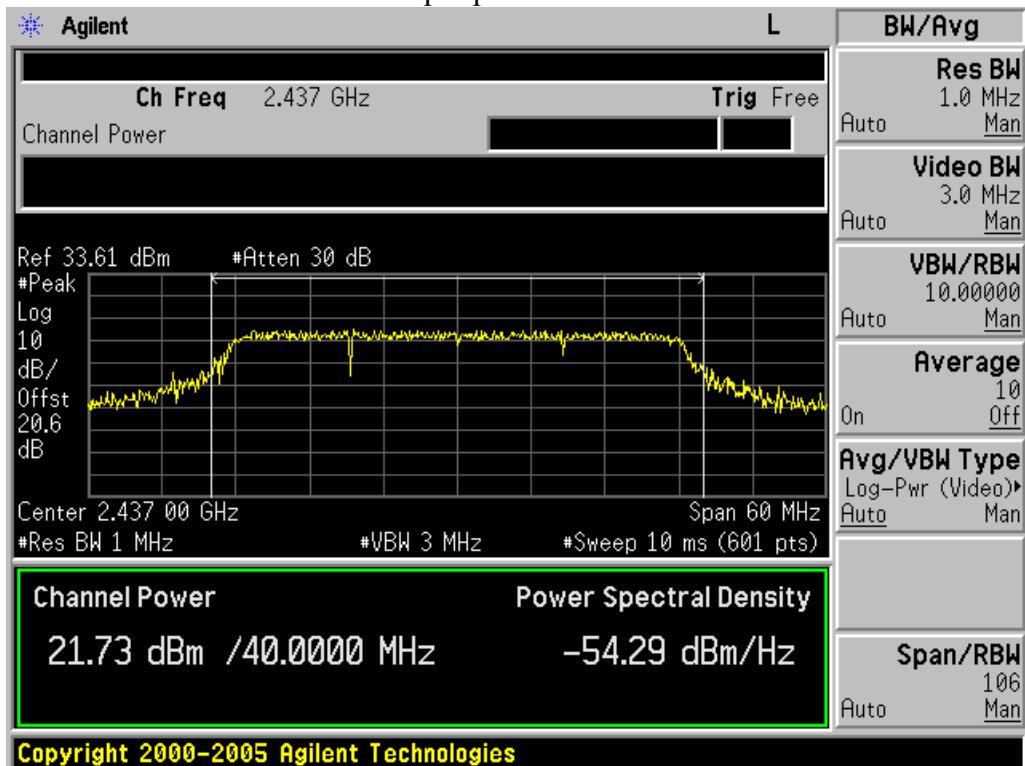
## 11n HT40 CH1 Chain1 Peak output power:



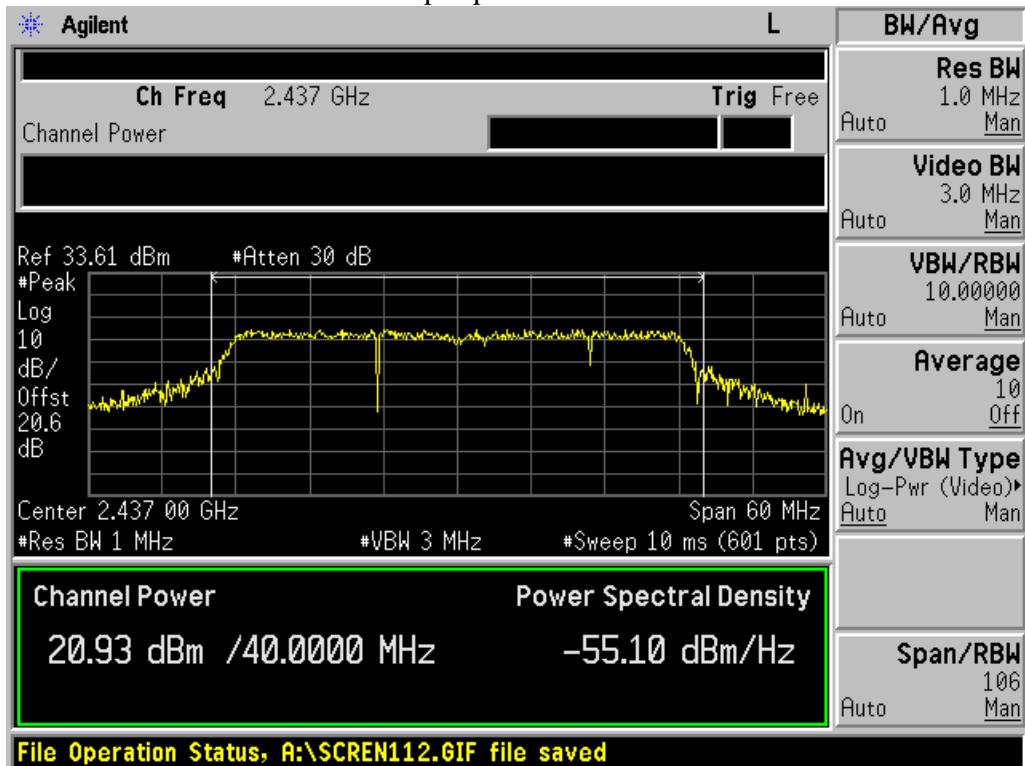
## 11n HT40 CH1 Chain2 Peak output power:



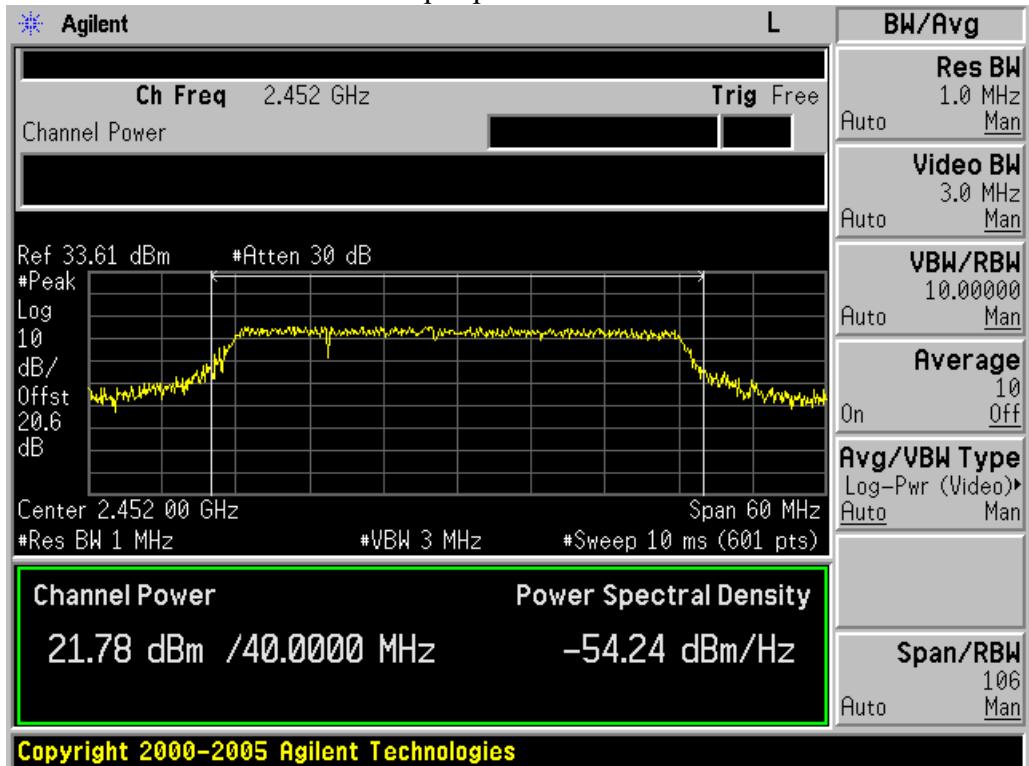
## 11n HT40 CH4 Chain1 Peak output power:



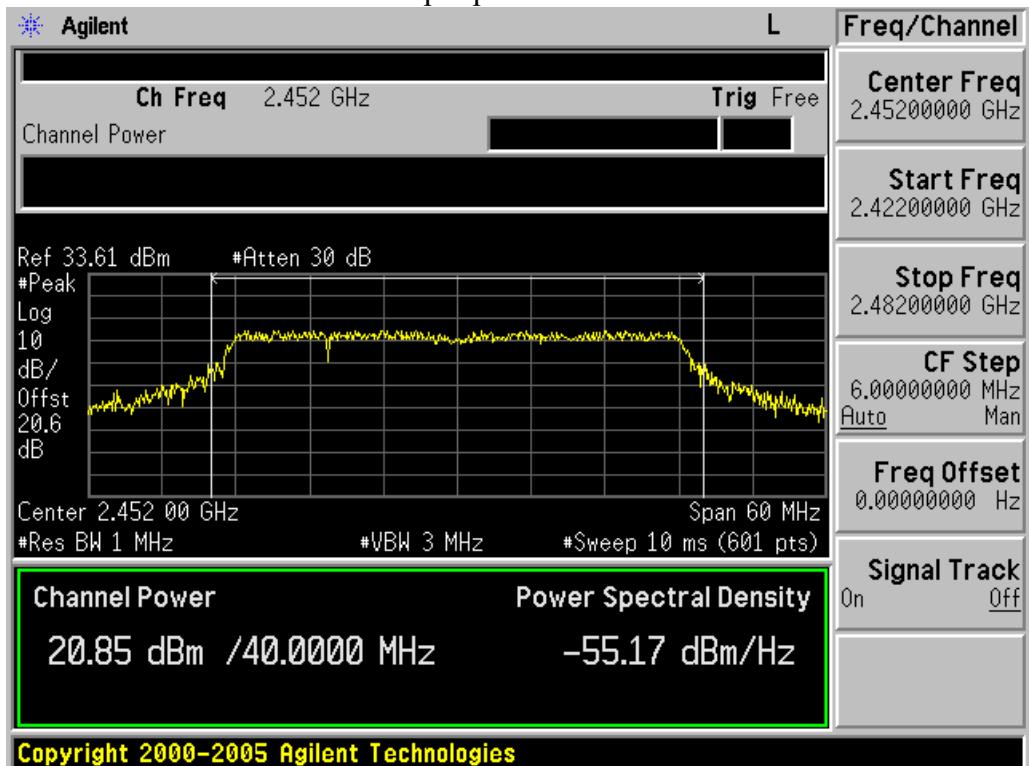
## 11n HT40 CH4 Chain2 Peak output power:



## 11n HT40 CH7 Chain1 Peak output power:



## 11n HT40 CH7 Chain2 Peak output power:



## 7. BAND EDGE COMPLIANCE TEST

### 7.1. Test Equipment

| Item | Equipment         | Manufacturer | Model No.   | Serial No. | Last Cal.   | Cal. Interval |
|------|-------------------|--------------|-------------|------------|-------------|---------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A      | US44300459 | May,10, 08  | 1 Year        |
| 2.   | Amp               | HP           | 8449B       | 3008A00863 | May 10, 08  | 1 Year        |
| 3.   | Antenna           | EMCO         | 3115        | 9607-4877  | Jan. 23, 07 | 1.5 Year      |
| 4.   | HF Cable          | Hubersuhne   | Sucoflex104 | -          | May 10, 08  | 1 Year        |

### 7.2. Limit

According to §15.247(c), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

### 7.3. Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upperband-edges of the emission:
  - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

### 7.4. Test Results

Pass (The testing data was attached in the next pages.)

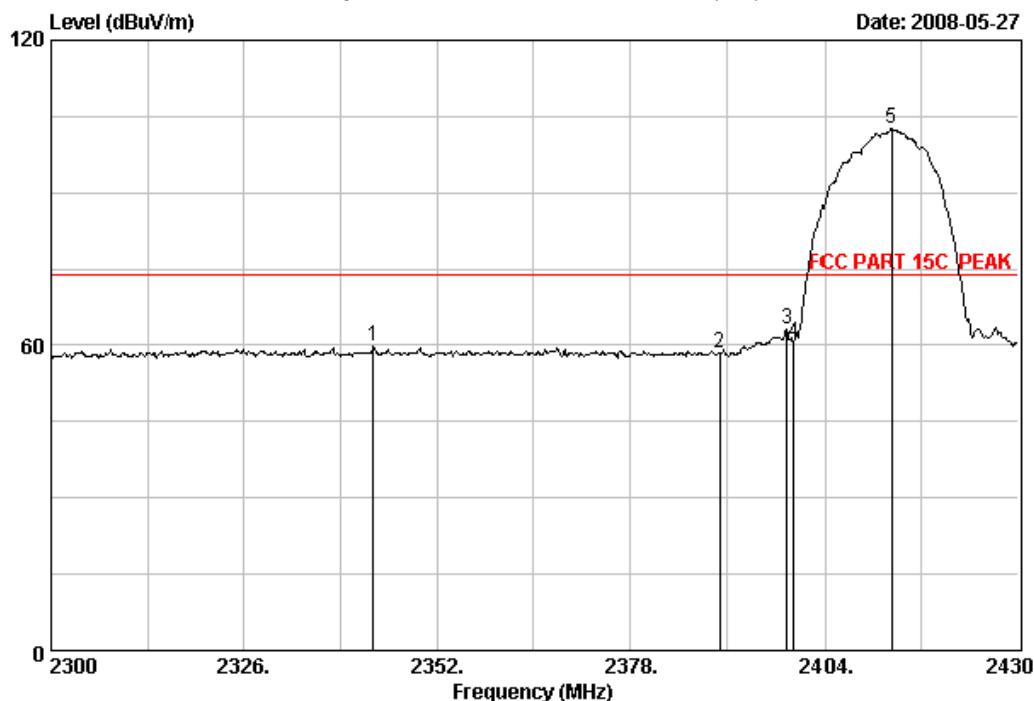


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Postcode:518057

Data: 177

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber Data no. : 177  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11b CH1:2412MHz Tx

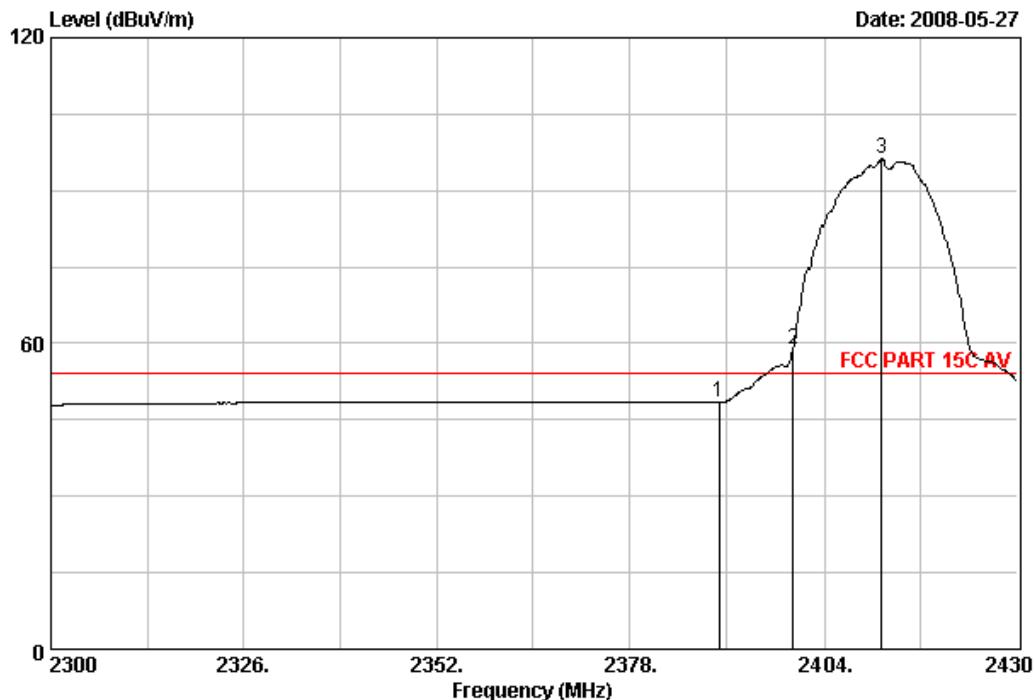
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2343.42      | 28.87                    | 6.67                  | 35.19                 | 59.64             | 59.99             | 74.00              | 14.01          | Peak   |
| 2 2390.00      | 28.99                    | 6.71                  | 35.18                 | 57.98             | 58.50             | 74.00              | 15.50          | Peak   |
| 3 2399.06      | 28.99                    | 6.73                  | 35.18                 | 62.52             | 63.06             | 74.00              | 10.94          | Peak   |
| 4 2400.00      | 28.99                    | 6.73                  | 35.18                 | 60.01             | 60.55             | 74.00              | 13.45          | Peak   |
| 5 2412.97      | 29.03                    | 6.77                  | 35.17                 | 101.93            | 102.56            | 74.00              | -28.56         | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 178 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber Data no. : 178  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11b CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |         |  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|--|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |  |
| <hr/>          |                          |                       |                       |                   |                   |                    |                |         |  |
| 1 2390.00      | 28.99                    | 6.71                  | 35.18                 | 47.84             | 48.36             | 54.00              | 5.64           | Average |  |
| 2 2400.00      | 28.99                    | 6.73                  | 35.18                 | 58.24             | 58.78             | 54.00              | -4.78          | Average |  |
| 3 2411.67      | 29.03                    | 6.73                  | 35.18                 | 95.61             | 96.19             | 54.00              | -42.19         | Average |  |

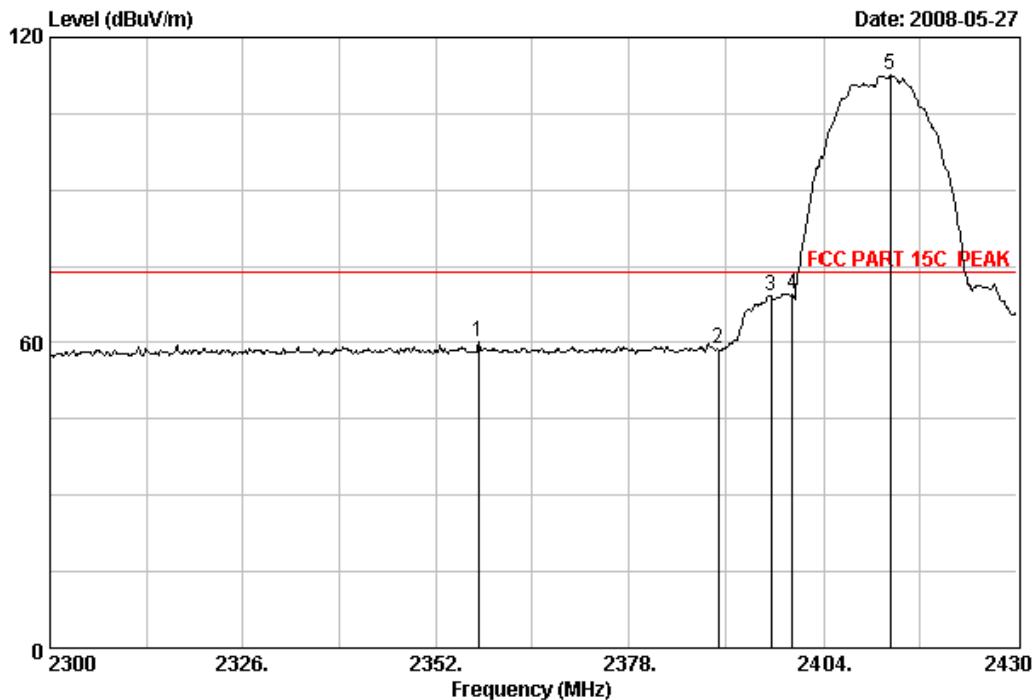
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Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 175 File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber Data no. : 175  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11b CH1:2412MHz Tx

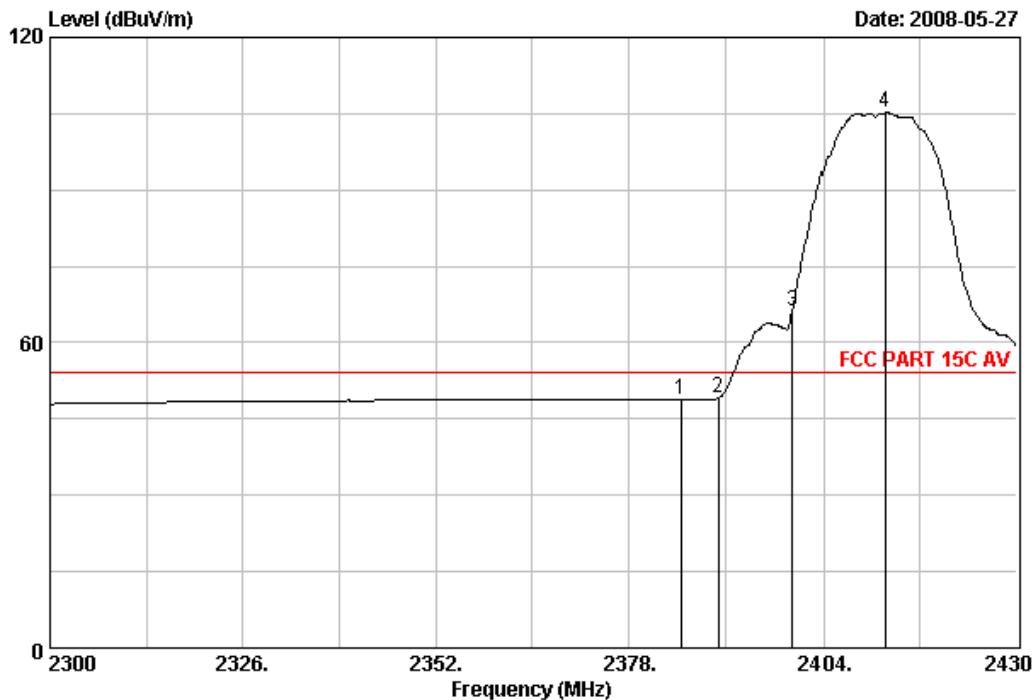
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2357.72      | 28.91                    | 6.69                  | 35.19                 | 59.67             | 60.08             | 74.00              | 13.92          | Peak   |
| 2 2390.00      | 28.99                    | 6.71                  | 35.18                 | 58.36             | 58.88             | 74.00              | 15.12          | Peak   |
| 3 2397.11      | 28.99                    | 6.73                  | 35.18                 | 68.78             | 69.32             | 74.00              | 4.68           | Peak   |
| 4 2400.00      | 28.99                    | 6.73                  | 35.18                 | 68.88             | 69.42             | 74.00              | 4.58           | Peak   |
| 5 2412.97      | 29.03                    | 6.77                  | 35.17                 | 112.08            | 112.71            | 74.00              | -38.71         | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 176 File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber Data no. : 176  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11b CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |         |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
| 1 2385.02      | 28.95                    | 6.71                  | 35.19                 | 48.41             | 48.88             | 54.00              | 5.12           | Average |
| 2 2390.00      | 28.99                    | 6.71                  | 35.18                 | 48.50             | 49.02             | 54.00              | 4.98           | Average |
| 3 2400.00      | 28.99                    | 6.73                  | 35.18                 | 65.53             | 66.07             | 54.00              | -12.07         | Average |
| 4 2412.32      | 29.03                    | 6.77                  | 35.18                 | 104.52            | 105.14            | 54.00              | -51.14         | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



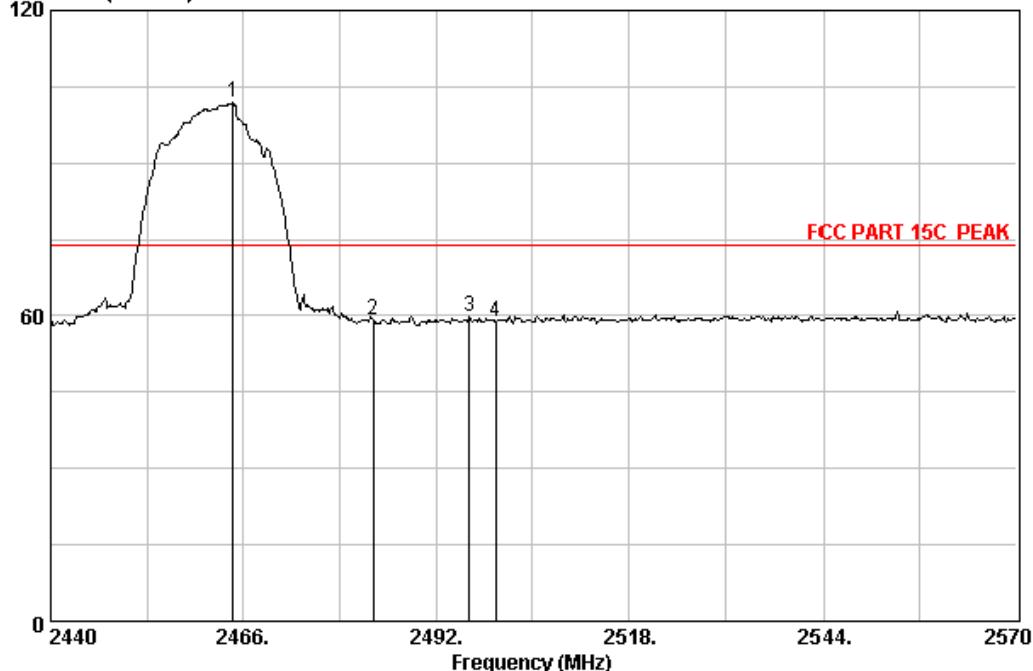
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Postcode:518057

Data: 179

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27

Level (dBuV/m)



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11b CH11:2462MHz Tx

Data no. : 179  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

|       |         | Ant.   | Cable | Amp    | Emission |          |          |        |        |
|-------|---------|--------|-------|--------|----------|----------|----------|--------|--------|
| Freq. |         | Factor | Loss  | Factor | Reading  | Level    | Limits   | Margin | Remark |
| (MHz) |         | (dB/m) | (dB)  | (dB)   | (dBuV)   | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1     | 2464.57 | 29.15  | 6.84  | 35.16  | 100.97   | 101.80   | 74.00    | -27.80 | Peak   |
| 2     | 2483.50 | 29.19  | 6.87  | 35.16  | 58.20    | 59.10    | 74.00    | 14.90  | Peak   |
| 3     | 2496.42 | 29.23  | 6.91  | 35.15  | 58.70    | 59.69    | 74.00    | 14.31  | Peak   |
| 4     | 2500.00 | 29.23  | 6.91  | 35.15  | 57.76    | 58.75    | 74.00    | 15.25  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

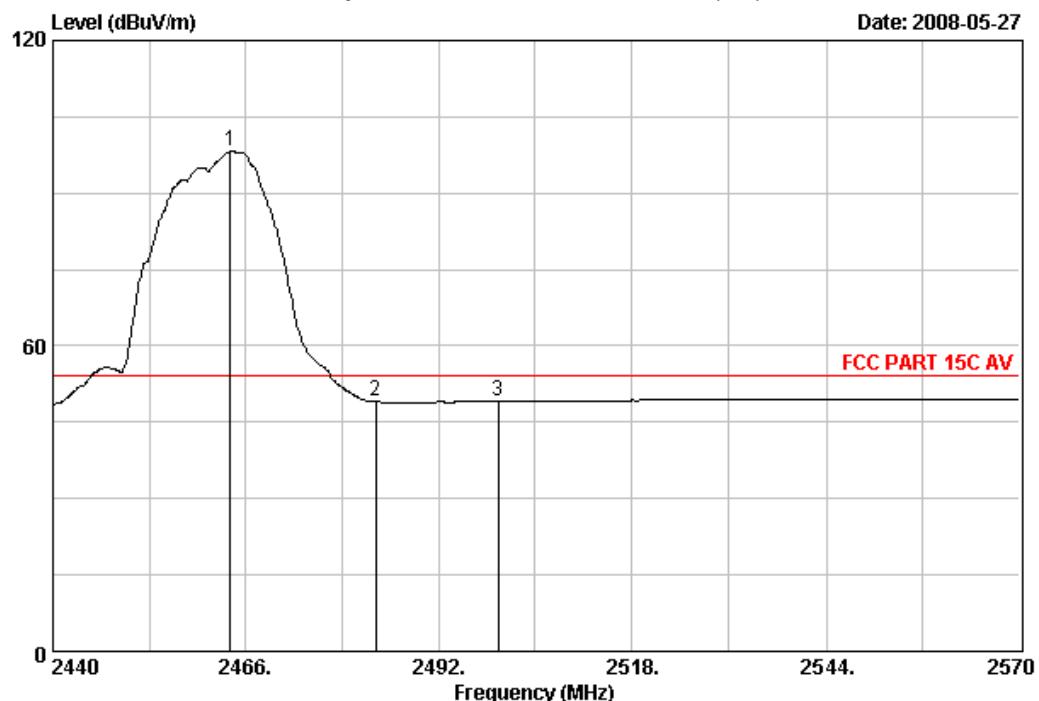


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Postcode:518057

Data: 180

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11b CH11:2462MHz Tx

Data no. : 180  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                    |         |  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|--------------------|---------|--|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dBuV/m) | Remark  |  |
| <hr/>          |                          |                       |                       |                   |                   |                    |                    |         |  |
| 1 2463.92      | 29.15                    | 6.84                  | 35.16                 | 97.35             | 98.18             | 54.00              | -44.18             | Average |  |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 48.11             | 49.01             | 54.00              | 4.99               | Average |  |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 48.06             | 49.05             | 54.00              | 4.95               | Average |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

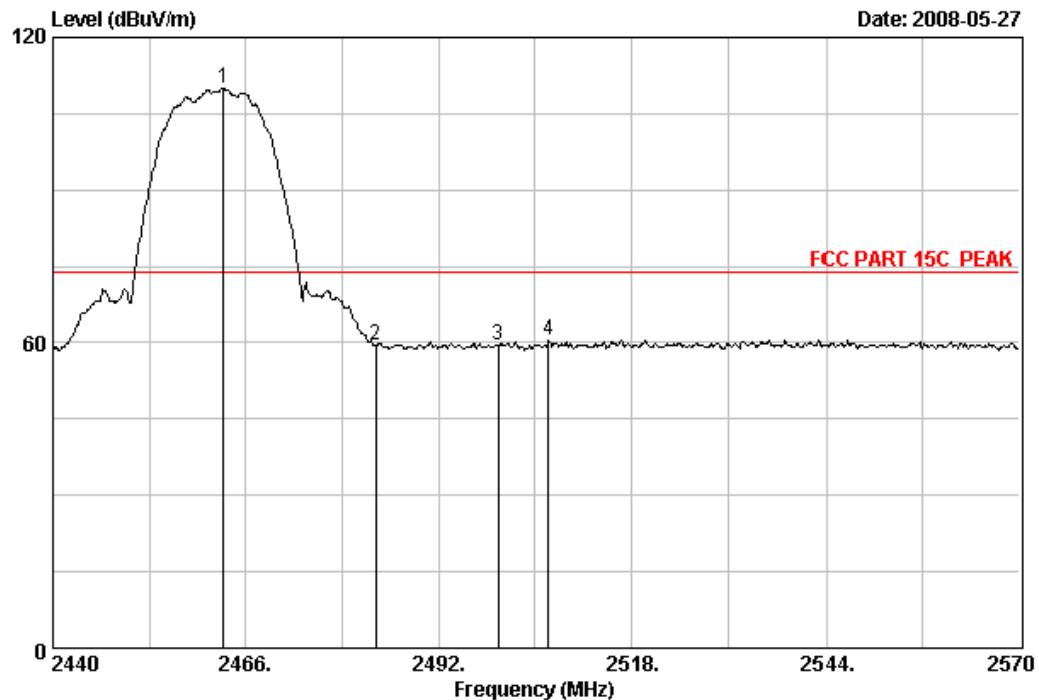


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Postcode:518057

Data: 181

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11b CH11:2462MHz Tx

Data no. : 181  
Ant. pol. : VERTICAL

Engineer : Jamy

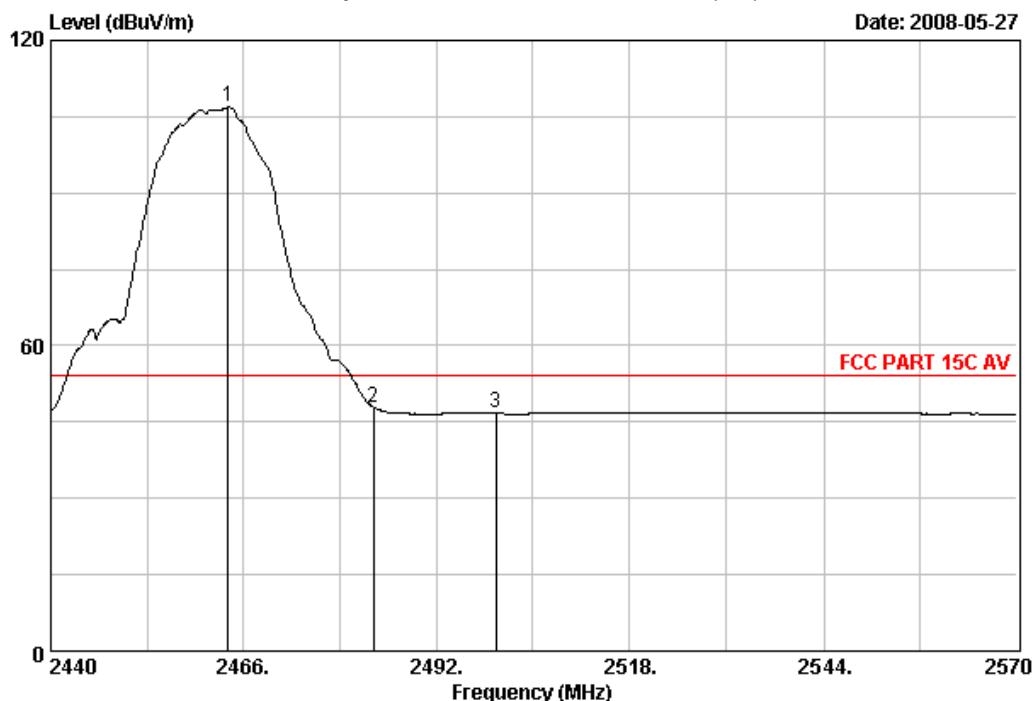
|       | Ant.    | Cable | Amp    | Emission |          |          |        |             |
|-------|---------|-------|--------|----------|----------|----------|--------|-------------|
| Freq. | Factor  | Loss  | Factor | Reading  | Level    | Limits   | Margin | Remark      |
| (MHz) | (dB/m)  | (dB)  | (dB)   | (dBuV)   | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1     | 2463.01 | 29.15 | 6.84   | 35.16    | 109.31   | 110.14   | 74.00  | -36.14 Peak |
| 2     | 2483.50 | 29.19 | 6.87   | 35.16    | 58.65    | 59.55    | 74.00  | 14.45 Peak  |
| 3     | 2500.00 | 29.23 | 6.91   | 35.15    | 58.37    | 59.36    | 74.00  | 14.64 Peak  |
| 4     | 2506.82 | 29.29 | 6.91   | 35.15    | 59.58    | 60.63    | 74.00  | 13.37 Peak  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 182 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber Data no. : 182  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11b CH11:2462MHz Tx

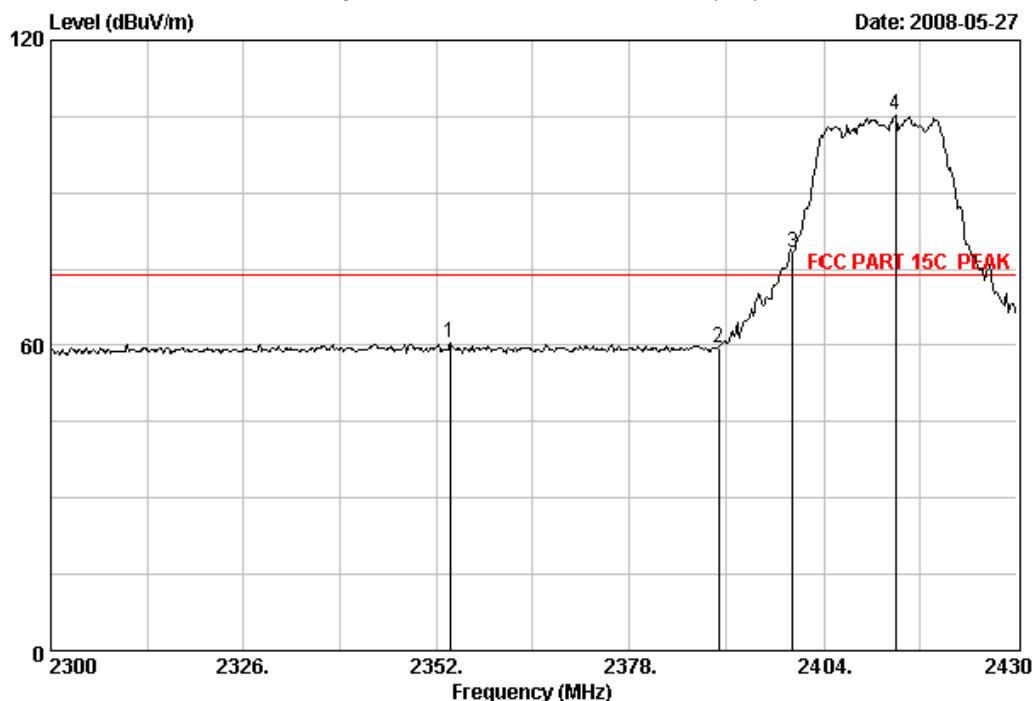
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |         |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
| 1 2463.92      | 29.15                    | 6.84                  | 35.16                 | 106.00            | 106.83            | 54.00              | -52.83         | Average |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 46.98             | 47.88             | 54.00              | 6.12           | Average |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 45.70             | 46.69             | 54.00              | 7.31           | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 185 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11g CH1:2412MHz Tx

Data no. : 185  
Ant. pol. : HORIZONTAL

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2353.82      | 28.91                    | 6.67                  | 35.19                 | 60.13             | 60.52             | 74.00              | 13.48          | Peak   |
| 2 2390.00      | 28.99                    | 6.71                  | 35.18                 | 59.03             | 59.55             | 74.00              | 14.45          | Peak   |
| 3 2400.00      | 28.99                    | 6.73                  | 35.18                 | 77.56             | 78.10             | 74.00              | -4.10          | Peak   |
| 4 2413.62      | 29.03                    | 6.77                  | 35.17                 | 104.72            | 105.35            | 74.00              | -31.35         | Peak   |

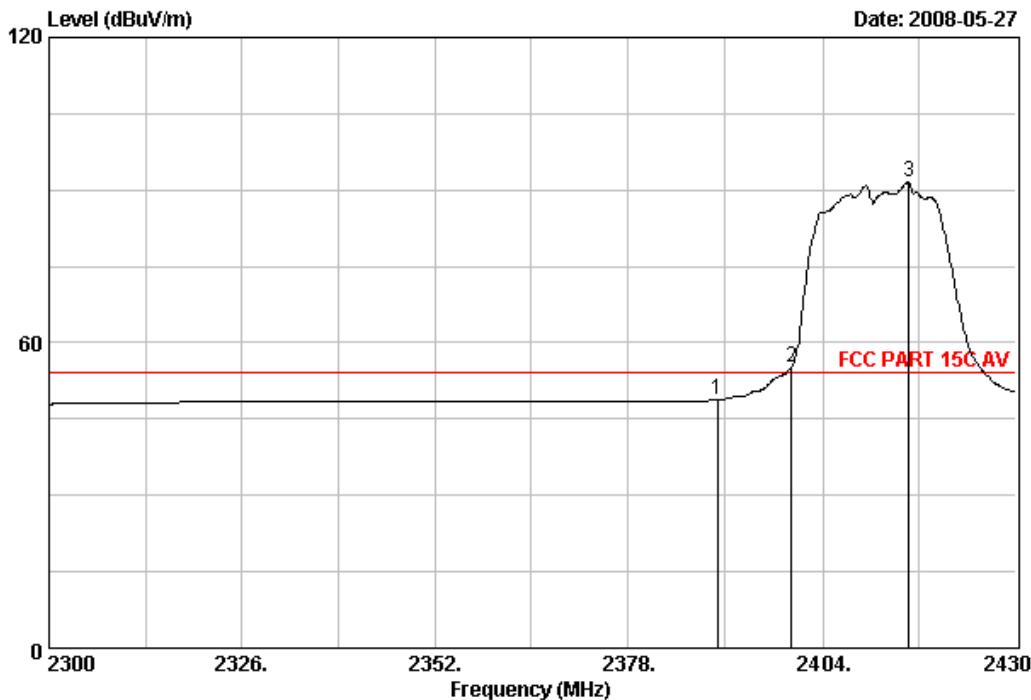
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 186

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11g CH1:2412MHz Tx

Data no. : 186  
Ant. pol. : HORIZONTAL

Engineer : Jamy  
Test Mode : IEEE802.11g CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |         |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
| 1 2390.00      | 28.99                    | 6.71                  | 35.18                 | 48.35             | 48.87             | 54.00              | 5.13           | Average |
| 2 2400.00      | 28.99                    | 6.73                  | 35.18                 | 54.74             | 55.28             | 54.00              | -1.28          | Average |
| 3 2415.57      | 29.03                    | 6.77                  | 35.17                 | 90.98             | 91.61             | 54.00              | -37.61         | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

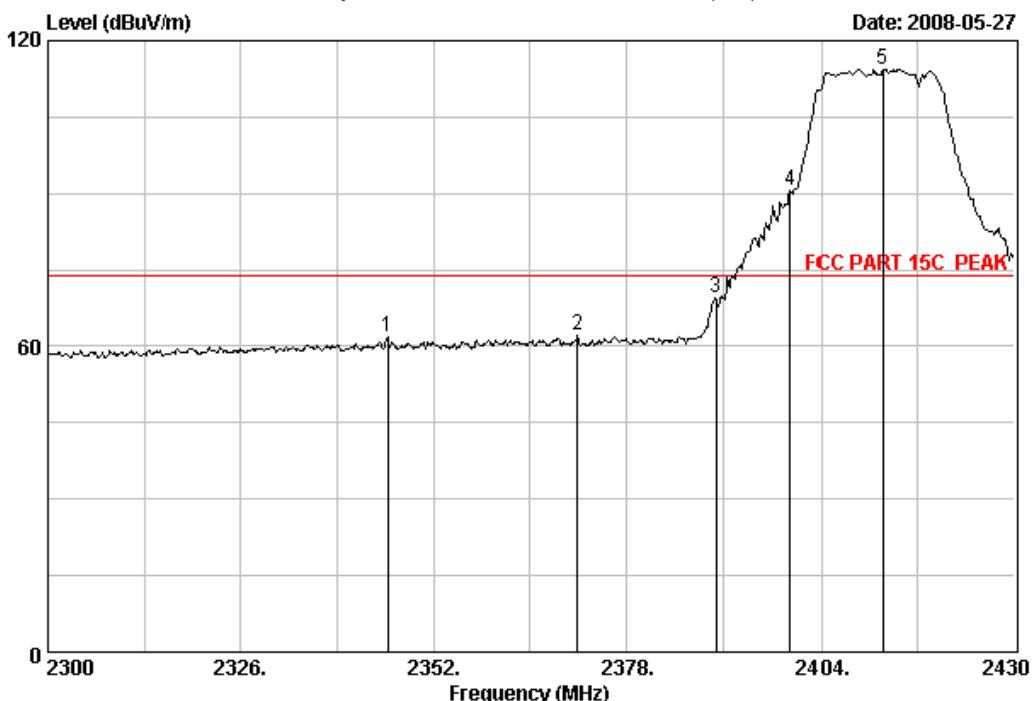


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Postcode:518057

Data: 183

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11g CH1:2412MHz Tx

Data no. : 183  
Ant. pol. : VERTICAL

Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|--|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |  |
| <hr/>          |                          |                       |                       |                   |                   |                    |                |        |  |
| 1 2345.76      | 28.87                    | 6.67                  | 35.19                 | 61.51             | 61.86             | 74.00              | 12.14          | Peak   |  |
| 2 2371.37      | 28.95                    | 6.69                  | 35.19                 | 61.59             | 62.04             | 74.00              | 11.96          | Peak   |  |
| 3 2390.00      | 28.99                    | 6.71                  | 35.18                 | 68.92             | 69.44             | 74.00              | 4.56           | Peak   |  |
| 4 2400.00      | 28.99                    | 6.73                  | 35.18                 | 90.00             | 90.54             | 74.00              | -16.54         | Peak   |  |
| 5 2412.32      | 29.03                    | 6.77                  | 35.18                 | 113.77            | 114.39            | 74.00              | -40.39         | Peak   |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

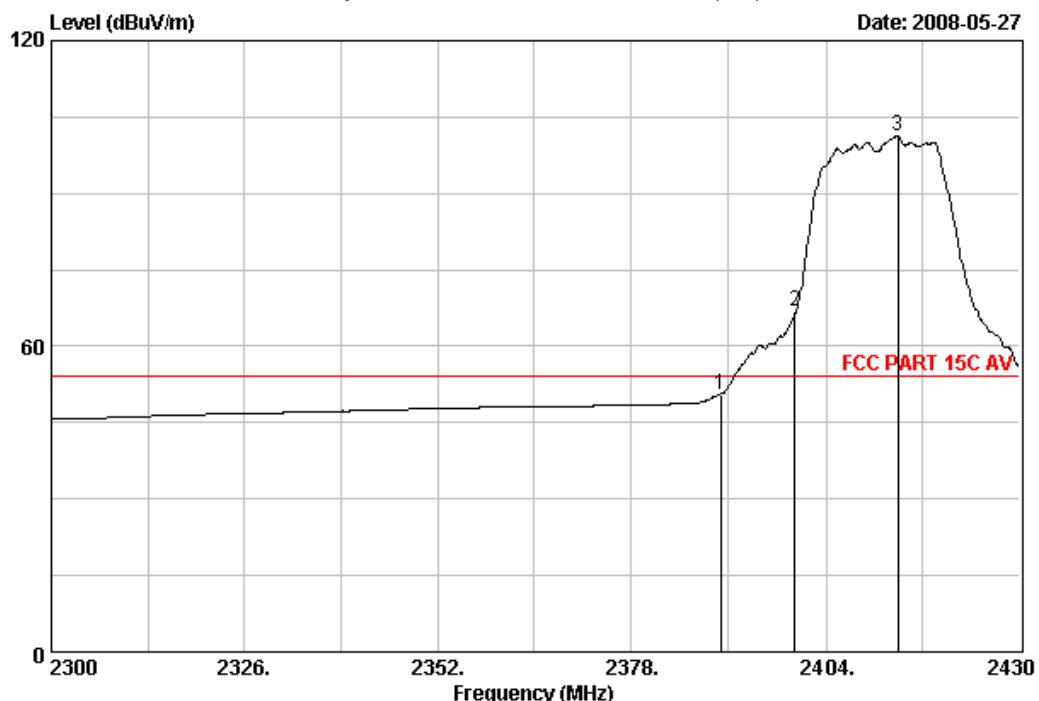


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Data: 184

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11g CH1:2412MHz Tx

Data no. : 184  
Ant. pol. : VERTICAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |         |  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|--|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |  |
| <hr/>          |                          |                       |                       |                   |                   |                    |                |         |  |
| 1 2390.00      | 28.99                    | 6.71                  | 35.18                 | 50.10             | 50.62             | 54.00              | 3.38           | Average |  |
| 2 2400.00      | 28.99                    | 6.73                  | 35.18                 | 66.46             | 67.00             | 54.00              | -13.00         | Average |  |
| 3 2413.62      | 29.03                    | 6.77                  | 35.17                 | 100.66            | 101.29            | 54.00              | -47.29         | Average |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

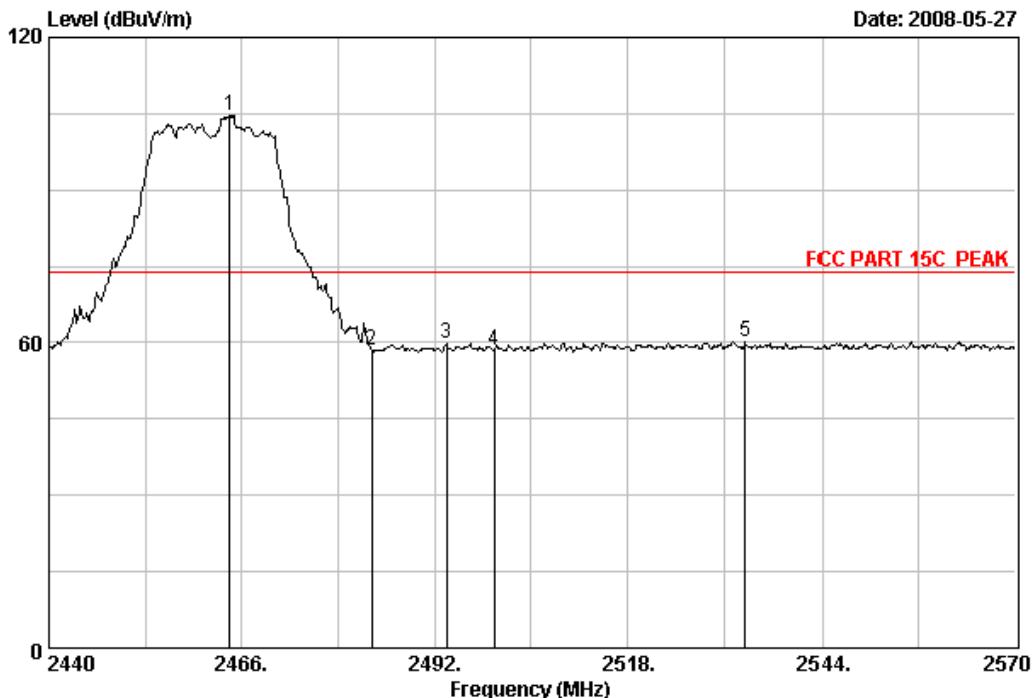


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Data: 187

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11g CH11:2462MHz Tx

Data no. : 187  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 2464.31      | 29.15                    | 6.84                  | 35.16                 | 103.79            | 104.62            | 74.00              | -30.62         | Peak   |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 57.71             | 58.61             | 74.00              | 15.39          | Peak   |
| 3 2493.56      | 29.23                    | 6.91                  | 35.15                 | 58.84             | 59.83             | 74.00              | 14.17          | Peak   |
| 4 2500.00      | 29.23                    | 6.91                  | 35.15                 | 57.65             | 58.64             | 74.00              | 15.36          | Peak   |
| 5 2533.86      | 29.35                    | 6.96                  | 35.14                 | 58.98             | 60.15             | 74.00              | 13.85          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

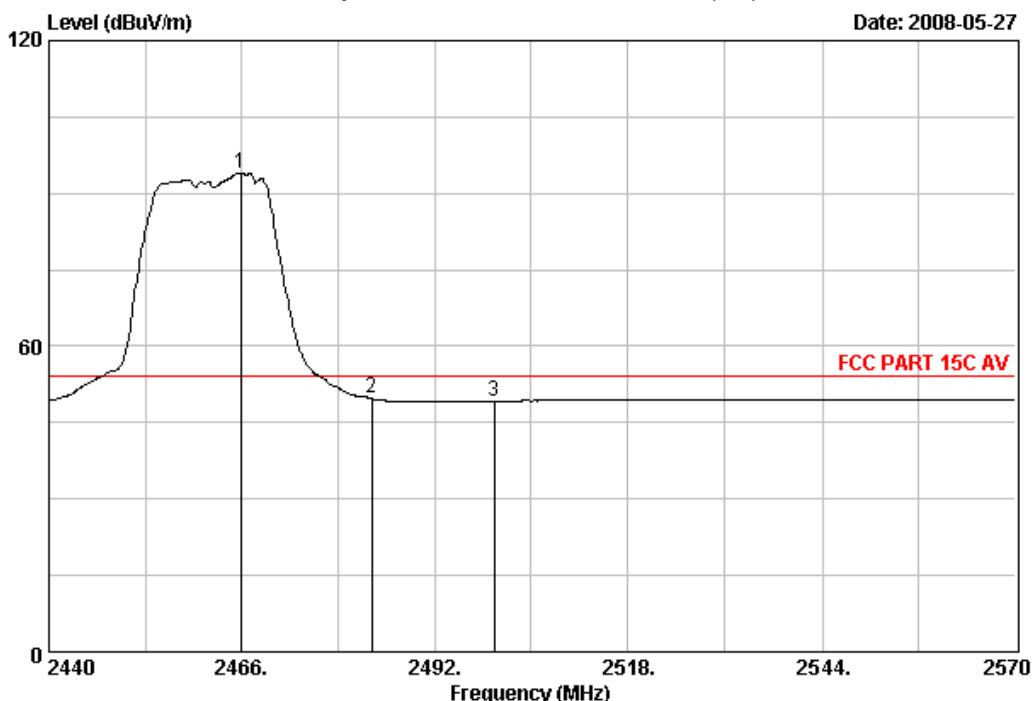


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Data: 188

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11g CH11:2462MHz Tx

Data no. : 188  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

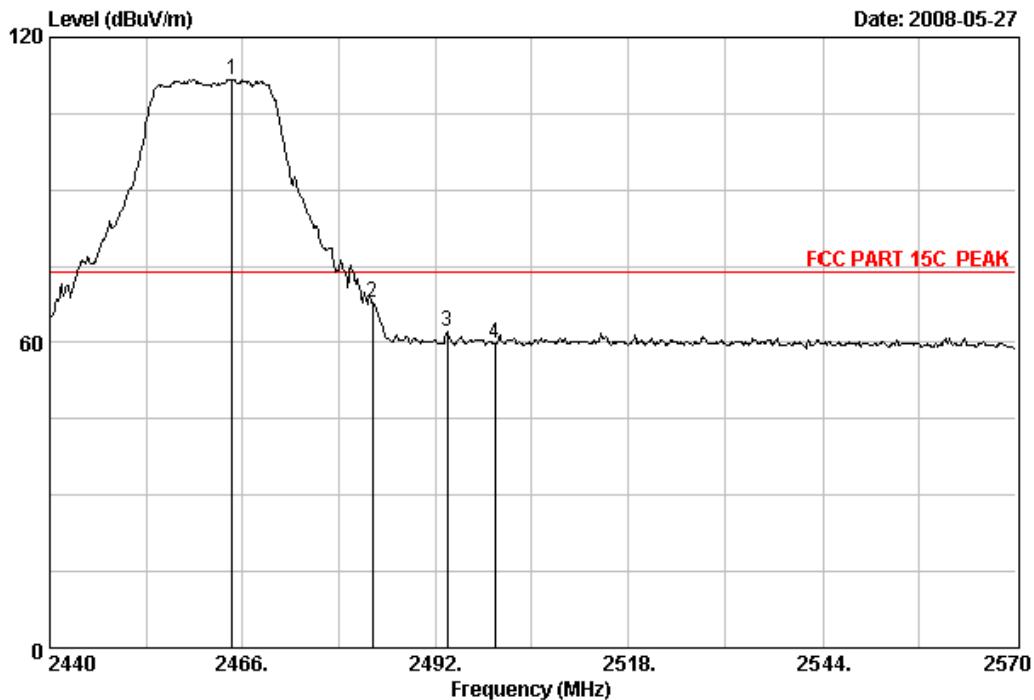
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                    |         |  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|--------------------|---------|--|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dBuV/m) | Remark  |  |
| <hr/>          |                          |                       |                       |                   |                   |                    |                    |         |  |
| 1 2465.87      | 29.15                    | 6.84                  | 35.16                 | 93.02             | 93.85             | 54.00              | -39.85             | Average |  |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 48.75             | 49.65             | 54.00              | 4.35               | Average |  |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 48.28             | 49.27             | 54.00              | 4.73               | Average |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 189 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber Data no. : 189  
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11g CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2464.57      | 29.15                    | 6.84                  | 35.16                 | 110.98            | 111.81            | 74.00              | -37.81         | Peak   |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 66.79             | 67.69             | 74.00              | 6.31           | Peak   |
| 3 2493.56      | 29.23                    | 6.91                  | 35.15                 | 61.07             | 62.06             | 74.00              | 11.94          | Peak   |
| 4 2500.00      | 29.23                    | 6.91                  | 35.15                 | 58.72             | 59.71             | 74.00              | 14.29          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

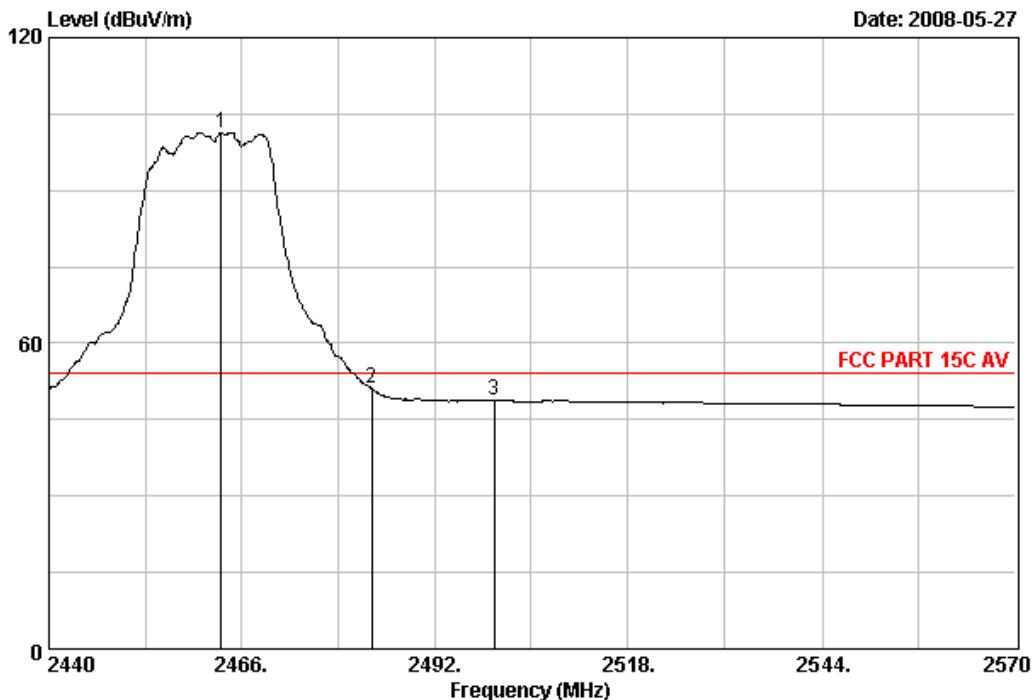


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Data: 190

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11g CH11:2462MHz Tx

Data no. : 190  
Ant. pol. : VERTICAL  
Engineer : Jamy

|       | Ant.    | Cable | Amp    | Emission |          |          |        |                |
|-------|---------|-------|--------|----------|----------|----------|--------|----------------|
| Freq. | Factor  | Loss  | Factor | Reading  | Level    | Limits   | Margin | Remark         |
| (MHz) | (dB/m)  | (dB)  | (dB)   | (dBuV)   | (dBuV/m) | (dBuV/m) | (dB)   |                |
| 1     | 2463.27 | 29.15 | 6.84   | 35.16    | 100.43   | 101.26   | 54.00  | -47.26 Average |
| 2     | 2483.50 | 29.19 | 6.87   | 35.16    | 50.15    | 51.05    | 54.00  | 2.95 Average   |
| 3     | 2500.00 | 29.23 | 6.91   | 35.15    | 47.88    | 48.87    | 54.00  | 5.13 Average   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

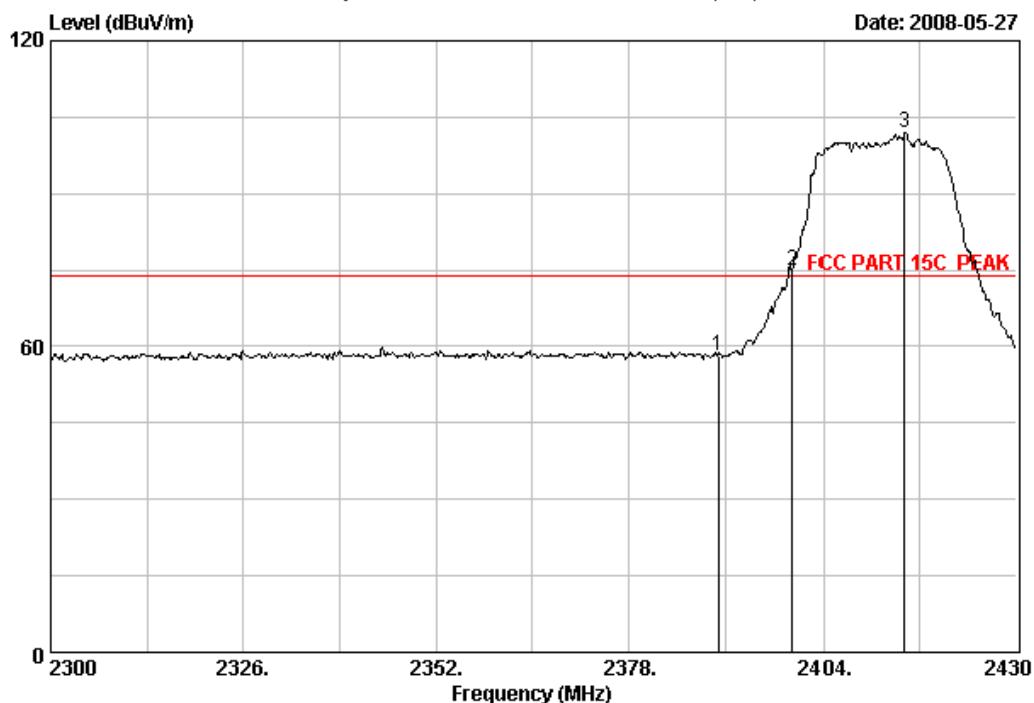


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Data: 193

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT20 CH1:2412MHz Tx

Data no. : 193  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

|       | Ant.    | Cable | Amp    | Emission |          |          |        |             |
|-------|---------|-------|--------|----------|----------|----------|--------|-------------|
| Freq. | Factor  | Loss  | Factor | Reading  | Level    | Limits   | Margin | Remark      |
| (MHz) | (dB/m)  | (dB)  | (dB)   | (dBuV)   | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1     | 2390.00 | 28.99 | 6.71   | 35.18    | 57.79    | 58.31    | 74.00  | 15.69 Peak  |
| 2     | 2400.00 | 28.99 | 6.73   | 35.18    | 74.29    | 74.83    | 74.00  | -0.83 Peak  |
| 3     | 2414.92 | 29.03 | 6.77   | 35.17    | 101.22   | 101.85   | 74.00  | -27.85 Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

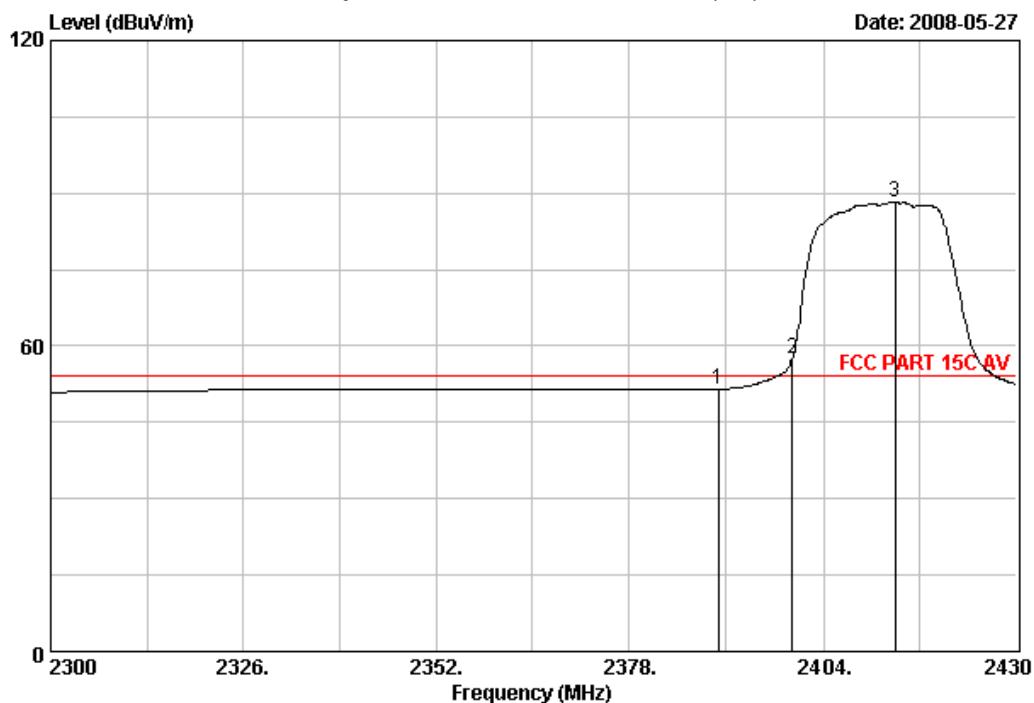


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Postcode:518057

Data: 194

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT20 CH1:2412MHz Tx

Data no. : 194  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |         |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
| 1 2390.00      | 28.99                    | 6.71                  | 35.18                 | 50.96             | 51.48             | 54.00              | 2.52           | Average |
| 2 2400.00      | 28.99                    | 6.73                  | 35.18                 | 56.92             | 57.46             | 54.00              | -3.46          | Average |
| 3 2413.62      | 29.03                    | 6.77                  | 35.17                 | 87.58             | 88.21             | 54.00              | -34.21         | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



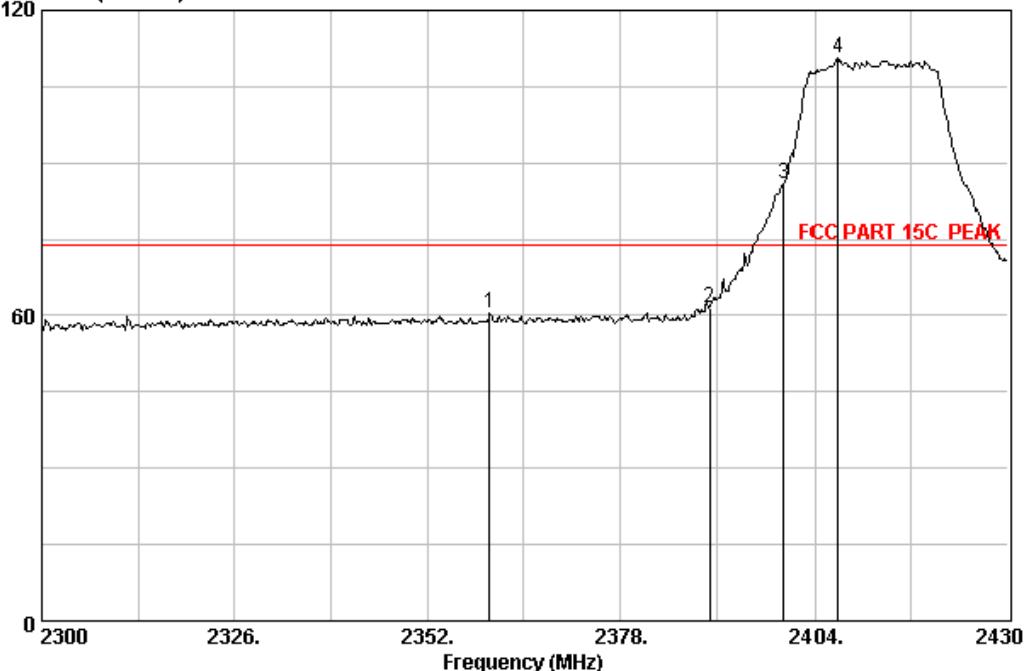
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Postcode:518057

Data: 191

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Level (dBuV/m)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT20 CH1:2412MHz Tx

Data no. : 191  
Ant. pol. : VERTICAL

Engineer : Jamy

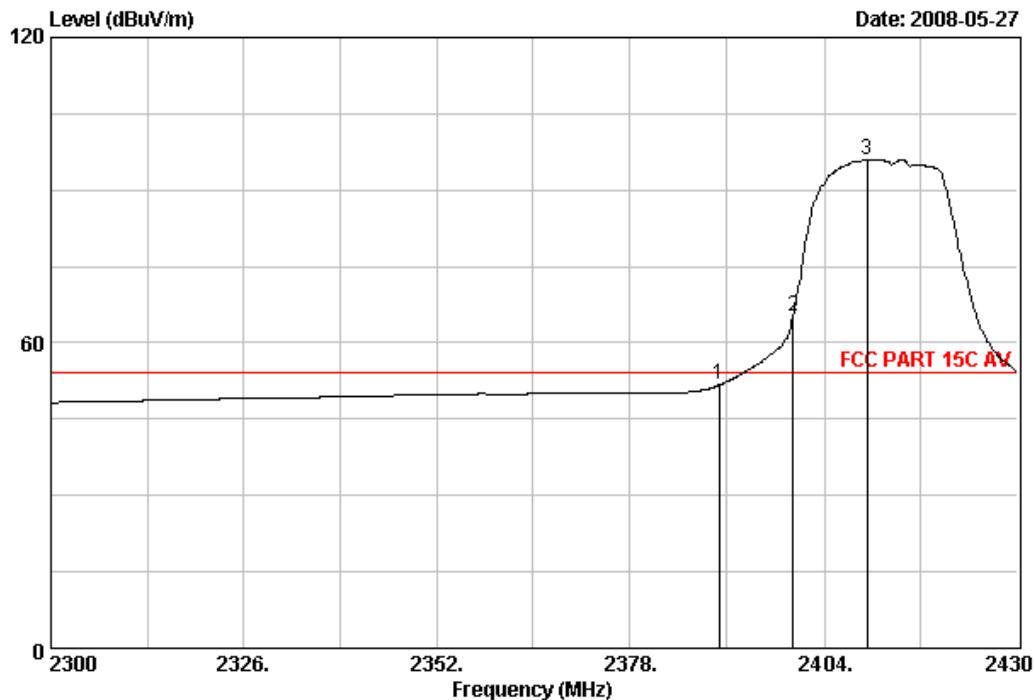
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2360.32      | 28.91                    | 6.69                  | 35.19                 | 60.08             | 60.49             | 74.00              | 13.51          | Peak   |
| 2 2390.00      | 28.99                    | 6.71                  | 35.18                 | 60.84             | 61.36             | 74.00              | 12.64          | Peak   |
| 3 2400.00      | 28.99                    | 6.73                  | 35.18                 | 85.52             | 86.06             | 74.00              | -12.06         | Peak   |
| 4 2407.12      | 29.03                    | 6.73                  | 35.18                 | 110.02            | 110.60            | 74.00              | -36.60         | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 192 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber Data no. : 192  
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54% Engineer : Jamy  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT20 CH1:2412MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 2390.00      | 28.99                    | 6.71                  | 35.18                 | 51.16             | 51.68             | 54.00              | 2.32           | Average |
| 2 2400.00      | 28.99                    | 6.73                  | 35.18                 | 64.51             | 65.05             | 54.00              | -11.05         | Average |
| 3 2409.72      | 29.03                    | 6.73                  | 35.18                 | 95.41             | 95.99             | 54.00              | -41.99         | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

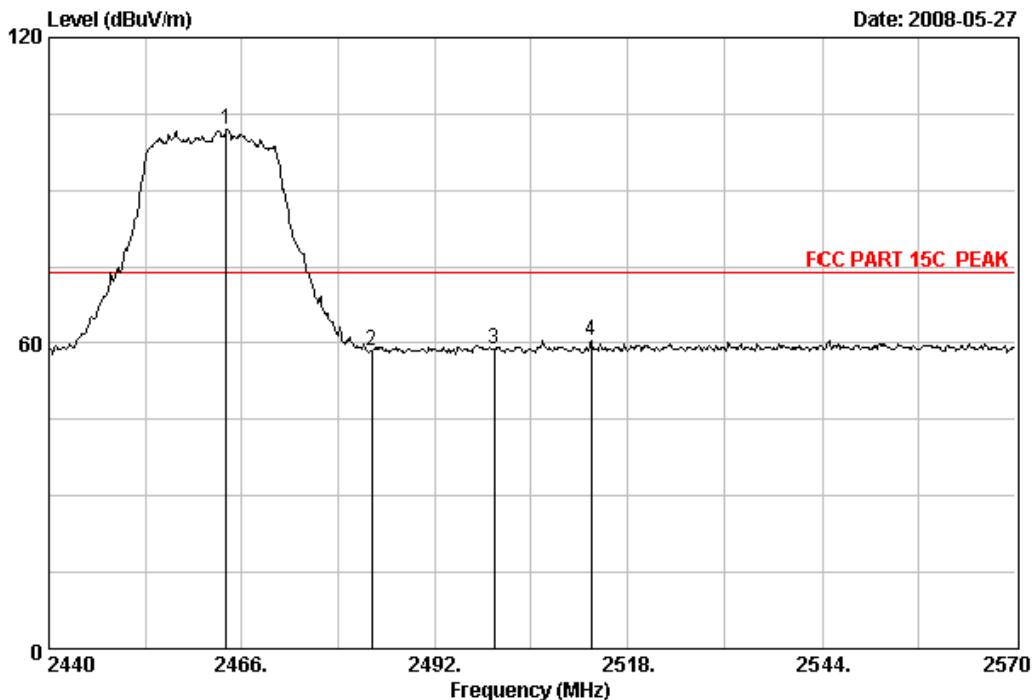


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Data: 195

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT20 CH11:2462MHz Tx

Data no. : 195  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|--|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |  |
| <hr/>          |                          |                       |                       |                   |                   |                    |                |        |  |
| 1 2463.92      | 29.15                    | 6.84                  | 35.16                 | 101.07            | 101.90            | 74.00              | -27.90         | Peak   |  |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 57.74             | 58.64             | 74.00              | 15.36          | Peak   |  |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 57.68             | 58.67             | 74.00              | 15.33          | Peak   |  |
| 4 2513.06      | 29.29                    | 6.93                  | 35.14                 | 59.33             | 60.41             | 74.00              | 13.59          | Peak   |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

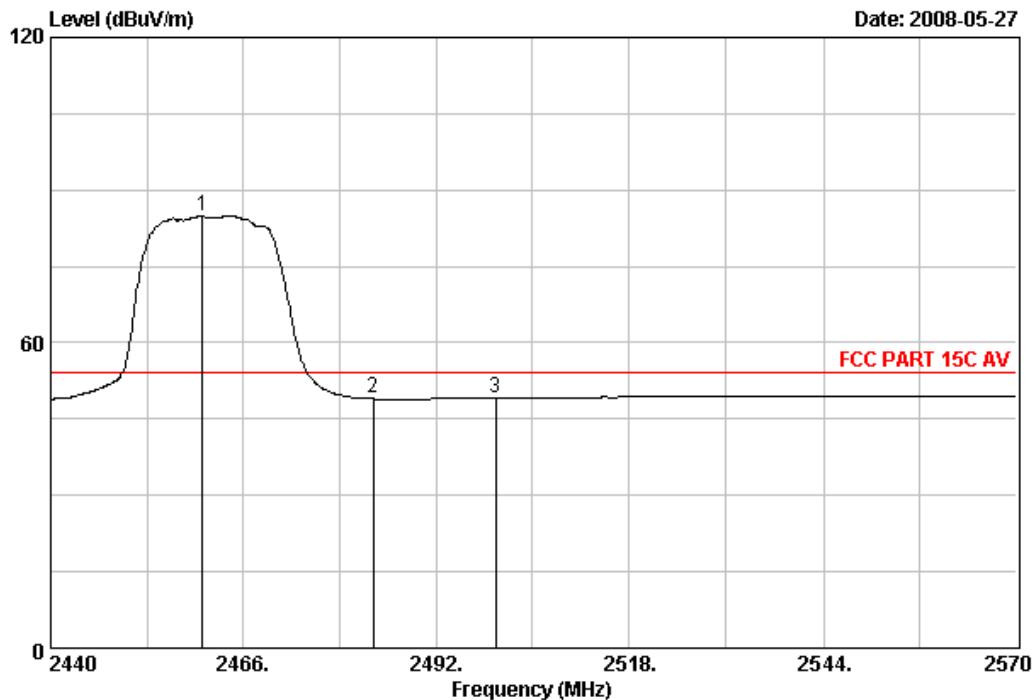


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Data: 196

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber Data no. : 196  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11n HT20 CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |         |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
| 1 2460.41      | 29.15                    | 6.84                  | 35.17                 | 84.18             | 85.00             | 54.00              | -31.00         | Average |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 48.07             | 48.97             | 54.00              | 5.03           | Average |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 48.10             | 49.09             | 54.00              | 4.91           | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

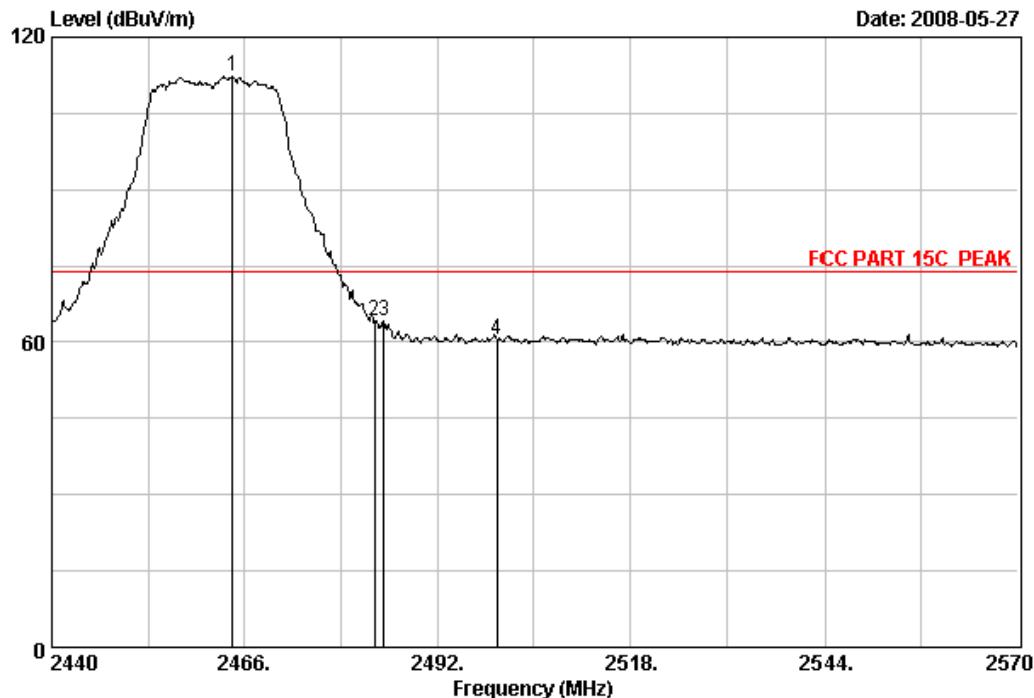


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Postcode:518057

Data: 197

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber Data no. : 197  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11n HT20 CH11:2462MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 2464.31      | 29.15                    | 6.84                  | 35.16                 | 111.40            | 112.23            | 74.00              | -38.23         | Peak   |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 63.12             | 64.02             | 74.00              | 9.98           | Peak   |
| 3 2484.72      | 29.19                    | 6.87                  | 35.16                 | 63.36             | 64.26             | 74.00              | 9.74           | Peak   |
| 4 2500.00      | 29.23                    | 6.91                  | 35.15                 | 59.38             | 60.37             | 74.00              | 13.63          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

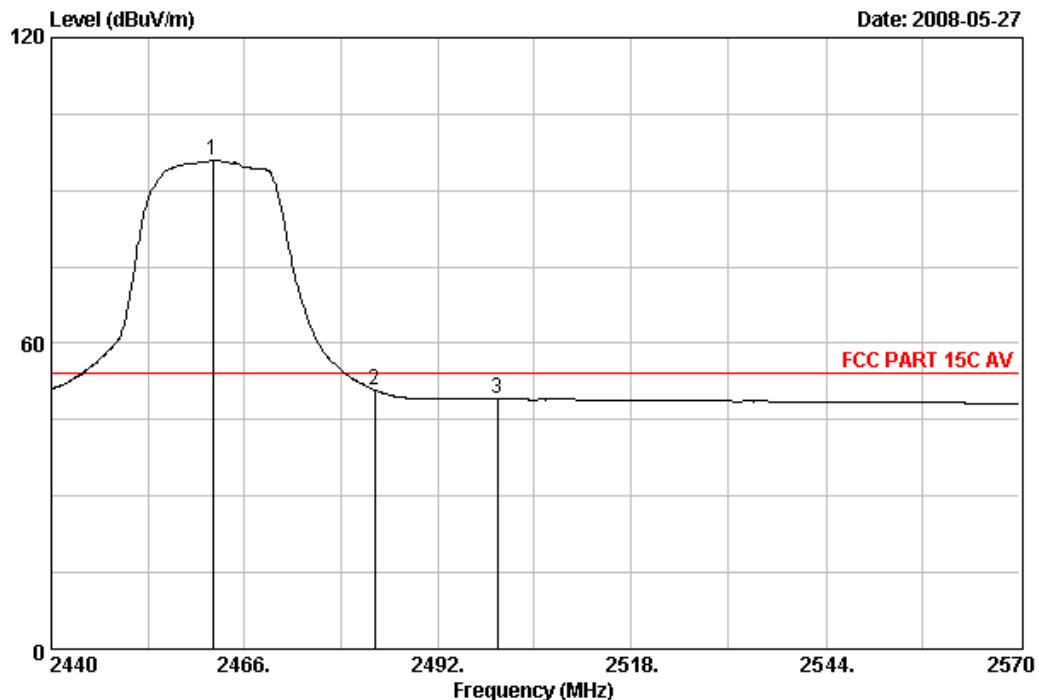


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Data: 198

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Router M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT20 CH11:2462MHz Tx

Data no. : 198  
Ant. pol. : VERTICAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 2461.71      | 29.15                    | 6.84                  | 35.17                 | 95.09             | 95.91             | 54.00              | -41.91         | Average |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 49.90             | 50.80             | 54.00              | 3.20           | Average |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 48.13             | 49.12             | 54.00              | 4.88           | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

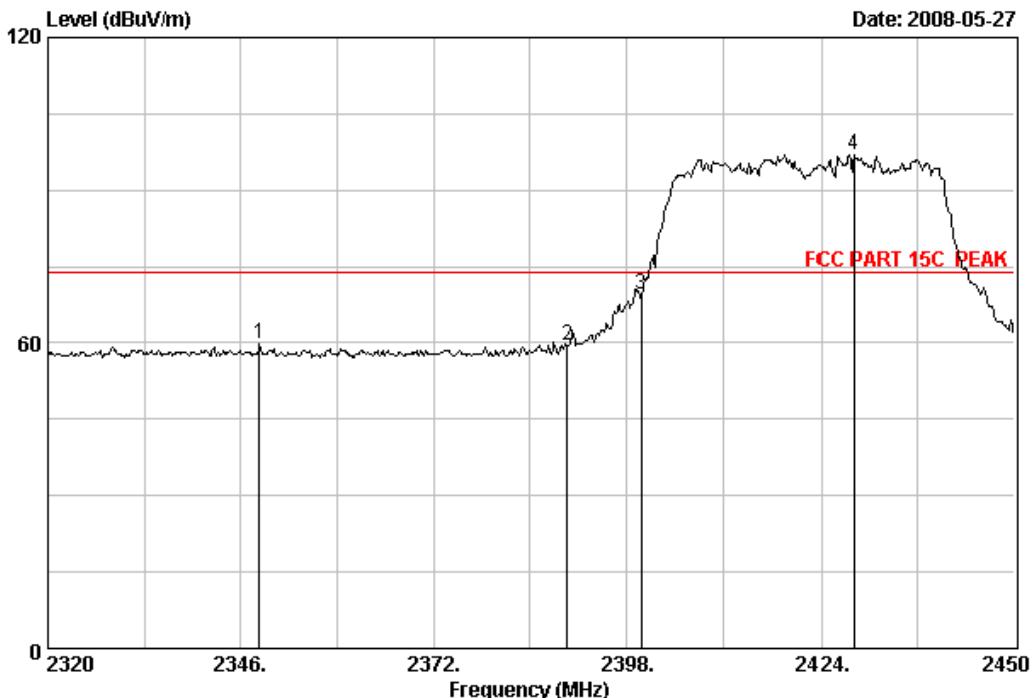


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Postcode:518057

Data: 201

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT40 CH1:2422MHz Tx

Data no. : 201  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|--|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |  |
| <hr/>          |                          |                       |                       |                   |                   |                    |                |        |  |
| 1 2348.47      | 28.87                    | 6.67                  | 35.19                 | 59.40             | 59.75             | 74.00              | 14.25          | Peak   |  |
| 2 2390.00      | 28.99                    | 6.71                  | 35.18                 | 59.06             | 59.58             | 74.00              | 14.42          | Peak   |  |
| 3 2400.00      | 28.99                    | 6.73                  | 35.18                 | 68.83             | 69.37             | 74.00              | 4.63           | Peak   |  |
| 4 2428.42      | 29.07                    | 6.77                  | 35.17                 | 96.37             | 97.04             | 74.00              | -23.04         | Peak   |  |

---

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



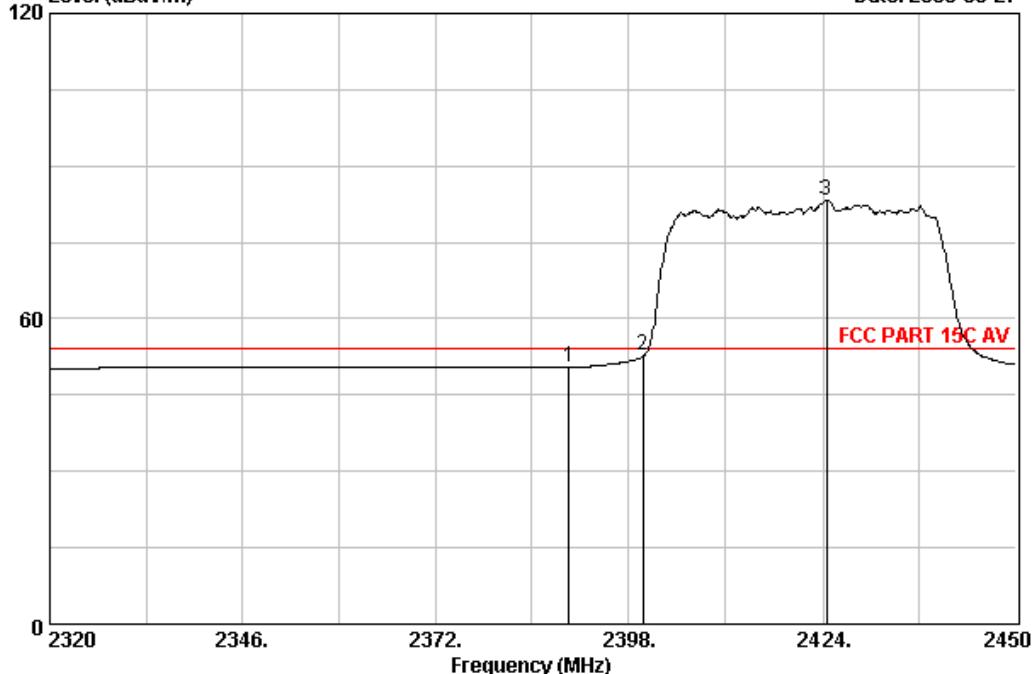
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Postcode:518057

Data: 202

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27

Level (dBuV/m)



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT40 CH1:2422MHz Tx

Data no. : 202  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

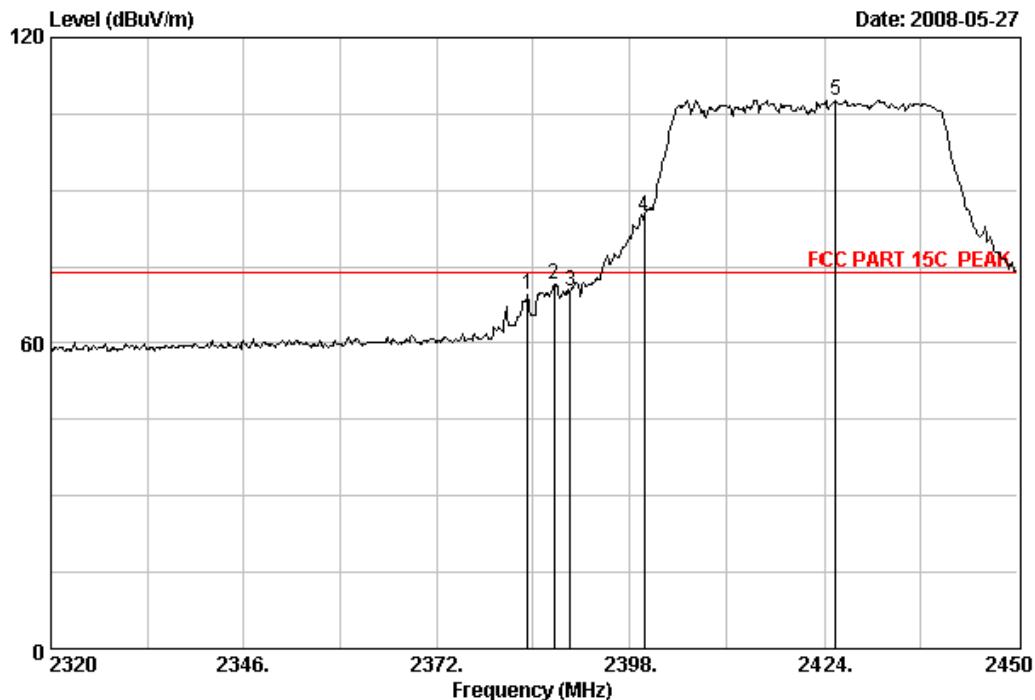
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 2390.00      | 28.99                    | 6.71                  | 35.18                 | 49.99             | 50.51             | 54.00              | 3.49           | Average |
| 2 2400.00      | 28.99                    | 6.73                  | 35.18                 | 52.12             | 52.66             | 54.00              | 1.34           | Average |
| 3 2424.52      | 29.07                    | 6.77                  | 35.17                 | 82.62             | 83.29             | 54.00              | -29.29         | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057

Data: 199 File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)



Site no. : RF Chamber Data no. : 199  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11n HT40 CH1:2422MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 2384.22      | 28.95                    | 6.71                  | 35.19                 | 68.93             | 69.40             | 74.00              | 4.60           | Peak   |
| 2 2387.86      | 28.99                    | 6.71                  | 35.18                 | 70.93             | 71.45             | 74.00              | 2.55           | Peak   |
| 3 2390.00      | 28.99                    | 6.71                  | 35.18                 | 69.64             | 70.16             | 74.00              | 3.84           | Peak   |
| 4 2400.00      | 28.99                    | 6.73                  | 35.18                 | 84.33             | 84.87             | 74.00              | -10.87         | Peak   |
| 5 2425.56      | 29.07                    | 6.77                  | 35.17                 | 107.10            | 107.77            | 74.00              | -33.77         | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

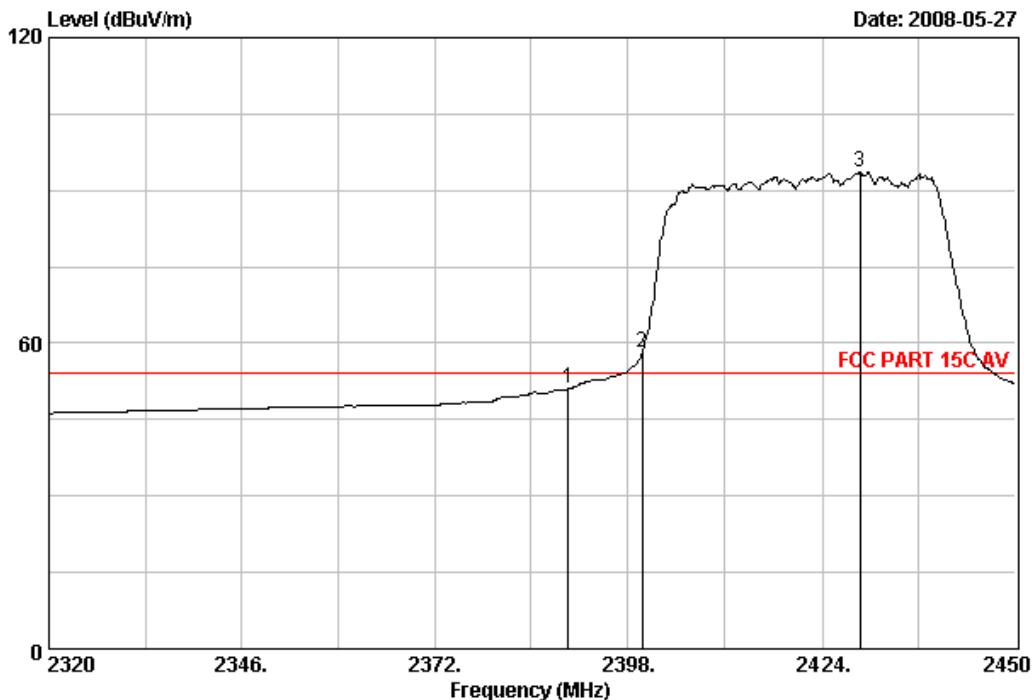


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Data: 200

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber Data no. : 200  
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Jamy  
 EUT : Wireless N Route M/N:TL-WR841ND  
 Power Rating: DC 12 V From adapter AC120V/60Hz  
 Test Mode : IEEE802.11n HT40 CH1:2422MHz Tx

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission |                 |                    |                    |         |  |
|----------------|--------------------------|-----------------------|-----------------------|----------|-----------------|--------------------|--------------------|---------|--|
|                |                          |                       |                       | Reading  | Level<br>(dBuV) | Limits<br>(dBuV/m) | Margin<br>(dBuV/m) | Remark  |  |
| <hr/>          |                          |                       |                       |          |                 |                    |                    |         |  |
| 1 2390.00      | 28.99                    | 6.71                  | 35.18                 | 50.54    | 51.06           | 54.00              | 2.94               | Average |  |
| 2 2400.00      | 28.99                    | 6.73                  | 35.18                 | 57.48    | 58.02           | 54.00              | -4.02              | Average |  |
| 3 2429.07      | 29.07                    | 6.77                  | 35.17                 | 93.01    | 93.68           | 54.00              | -39.68             | Average |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



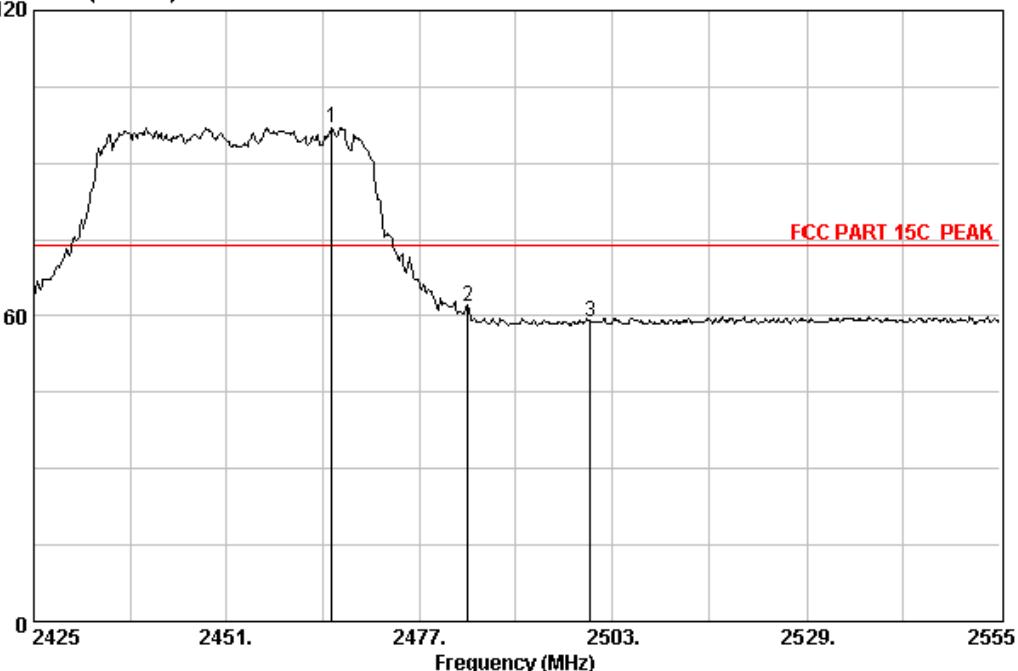
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Postcode:518057

Data: 203

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27

Level (dBuV/m)



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT40 CH7:2452MHz Tx

Data no. : 203  
Ant. pol. : HORIZONTAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                |        |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
| 1 2465.17      | 29.15                    | 6.84                  | 35.16                 | 96.14             | 96.97             | 74.00              | -22.97         | Peak   |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 60.83             | 61.73             | 74.00              | 12.27          | Peak   |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 57.88             | 58.87             | 74.00              | 15.13          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



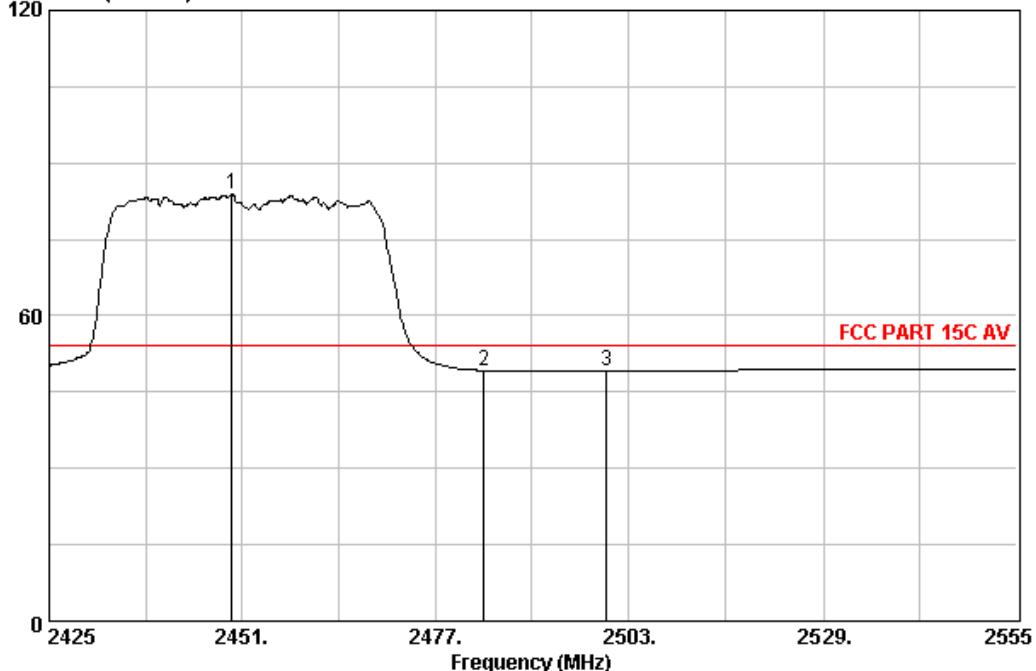
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Fax:+86-755-26632877  
Postcode:518057

Data: 204

File: D:\2008 report data\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27

Level (dBuV/m)



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT40 CH7:2452MHz Tx

Data no. : 204  
Ant. pol. : HORIZONTAL

Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 2449.57      | 29.11                    | 6.80                  | 35.17                 | 83.21             | 83.95             | 54.00              | -29.95         | Average |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 48.29             | 49.19             | 54.00              | 4.81           | Average |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 48.07             | 49.06             | 54.00              | 4.94           | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

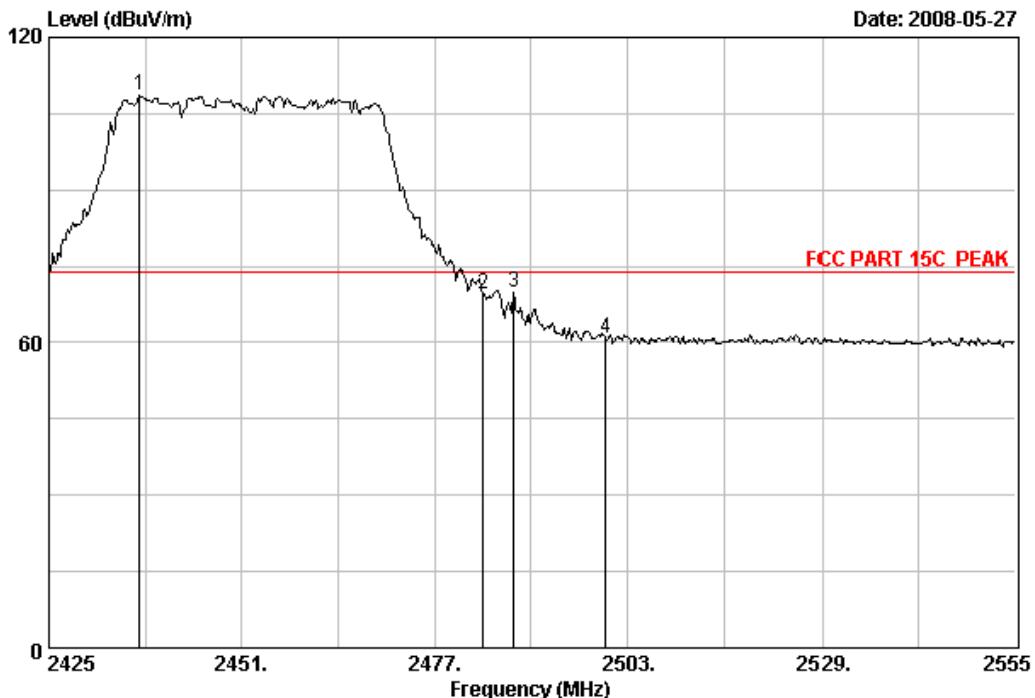


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Data: 205

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT40 CH7:2452MHz Tx

Data no. : 205  
Ant. pol. : VERTICAL  
Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |        |
| 1 2437.22      | 29.11                    | 6.80                  | 35.17                 | 107.73            | 108.47            | 74.00              | -34.47         | Peak   |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 68.52             | 69.42             | 74.00              | 4.58           | Peak   |
| 3 2487.66      | 29.23                    | 6.87                  | 35.15                 | 69.00             | 69.95             | 74.00              | 4.05           | Peak   |
| 4 2500.00      | 29.23                    | 6.91                  | 35.15                 | 59.79             | 60.78             | 74.00              | 13.22          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

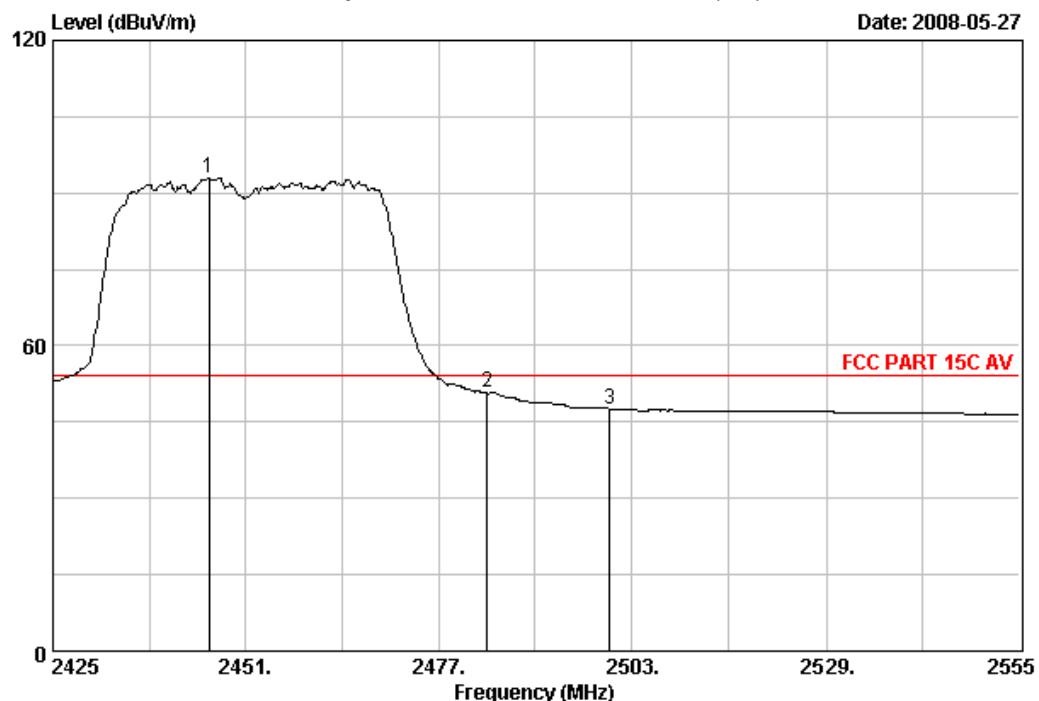


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Postcode:518057

Data: 206

File: D:\2008 report data\T\TP-LINK\TL-WR841ND.EMI (206)

Date: 2008-05-27



Site no. : RF Chamber  
Dis. / Ant. : 3m 3115 FACTOR  
Limit : FCC PART 15C AV  
Env. / Ins. : 23°C/54%  
EUT : Wireless N Route M/N:TL-WR841ND  
Power Rating: DC 12 V From adapter AC120V/60Hz  
Test Mode : IEEE802.11n HT40 CH7:2452MHz Tx

Data no. : 206  
Ant. pol. : VERTICAL

Engineer : Jamy

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Amp<br>Factor<br>(dB) | Emission          |                   |                    |                | Remark  |
|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------|---------|
|                |                          |                       |                       | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) |         |
| 1 2446.06      | 29.11                    | 6.80                  | 35.17                 | 92.28             | 93.02             | 54.00              | -39.02         | Average |
| 2 2483.50      | 29.19                    | 6.87                  | 35.16                 | 49.77             | 50.67             | 54.00              | 3.33           | Average |
| 3 2500.00      | 29.23                    | 6.91                  | 35.15                 | 46.62             | 47.61             | 54.00              | 6.39           | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

## 8. POWER SPECTRAL DENSITY TEST

### 8.1. Test Equipment

| Item | Equipment         | Manufacturer | Model No. | Serial No. | Last Cal.  | Cal. Interval |
|------|-------------------|--------------|-----------|------------|------------|---------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300459 | May,11, 07 | 1 Year        |
| 2    | RF Cable          | MIYAZAKI     | 8D-FB     | NO 3       | May,11,07  | 1 Year        |

### 8.2. Test Information

|                      |   |
|----------------------|---|
| EUT:                 | Wireless N Router   |
| M/N:                 | TL-WR841ND  |
| Test Date:           | Apr.26, 2008  |
| Ambient Temperature: | 23°C  |
| Relative Humidity:   | 60%   |
| Test standard:       | FCC PART 15C: 15.247  |
| Test mode:           | IEEE 802.11b TX / IEEE 802.11g TX<br>IEEE 802.11n TX (HT20) / IEEE 802.11n TX (HT40)                          |
| Test Frequency:      | 11b,11g,11n HT20: CH1: 2412MHz CH6: 2437MHz CH11: 2462MHz<br>11n HT40: CH1: 2422MHz CH4: 2437MHz CH7: 2452MHz |
| Test By:             | Jamy  |

### 8.3. Test Procedure

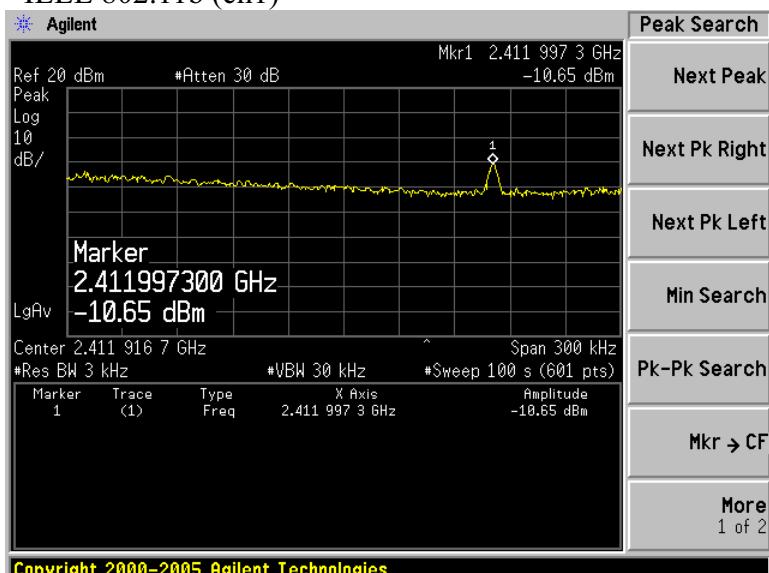
The transmitter output was connected to a spectrum analyzer . The power density was measured by spectrum analyzer with 3 KHz RBW and 30KHz VBW, sweep time=span/3KHz.

## 8.4. Test Results

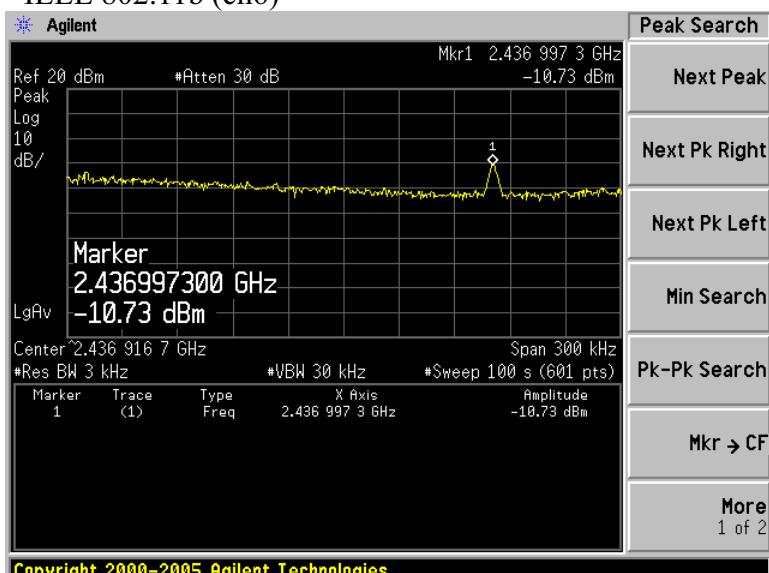
| <b>Maximum Power density</b>   |                        |           |                                      |           |            |                   |             |
|--|------------------------|-----------|--------------------------------------|-----------|------------|-------------------|-------------|
| EUT: Wireless N Router   | M/N:TL-WR841ND         |           |                                      |           |            |                   |             |
| Power: DC 12V From adapter 120V/60Hz   |                        |           |                                      |           |            |                   |             |
| Data Rate:11b 1Mbps ; 11g : 6Mbps ; 11n HT20 : 6.5Mbps ; 11n HT40 : 13.5Mbps(Note 1) |                        |           |                                      |           |            |                   |             |
| Ambient Temperature:23 °C  | Relative Humidity: 60% |           |                                      |           |            |                   |             |
| Test date:2008/04/24   | Test site: RF site     |           | Tested By: Jamy                      |           |            |                   |             |
| Cable Loss: 0.6dB Antenna Gain:3dBi  |                        |           |                                      |           |            |                   |             |
| Test CH  | 11b,11g,11n<br>HT20    |           | CH1:2412MHz CH6:2437MHz CH11:2462MHz |           |            |                   |             |
| Test CH  | 11n HT40               |           | CH1:2422MHz CH4:2437MHz CH7:2452MHz  |           |            |                   |             |
| Mode   | CH                     | Chain1    |                                      | Chain2    |            | Result            |             |
|  |                        | Read(dBm) | Level(dBm)                           | Read(dBm) | Level(dBm) | Total Power (dBm) | Limit (dBm) |
| 11b  | CH1                    | -10.65    | -10.05                               | -10.72    | -10.12     | <b>-7.07</b>      | 8           |
|  | CH6                    | -10.73    | -10.13                               | -10.87    | -10.27     | <b>-7.19</b>      | 8           |
|  | CH11                   | -11.08    | -10.48                               | -10.44    | -9.84      | <b>-7.14</b>      | 8           |
| 11g  | CH1                    | -16.72    | -16.12                               | -16.97    | -16.37     | <b>-13.23</b>     | 8           |
|  | CH6                    | -16.65    | -16.05                               | -17.34    | -16.74     | <b>-13.37</b>     | 8           |
|  | CH11                   | -16.81    | -16.21                               | -17.88    | -17.28     | <b>-13.70</b>     | 8           |
| 11n<br>HT20  | CH1                    | -16.72    | -16.12                               | -17.50    | -16.90     | <b>-13.48</b>     | 8           |
|  | CH6                    | -18.41    | -17.81                               | -16.62    | -16.02     | <b>-13.81</b>     | 8           |
|  | CH11                   | -18.03    | -17.43                               | -17.70    | -17.10     | <b>-14.25</b>     | 8           |
| 11n<br>HT40  | CH1                    | -22.39    | -21.79                               | -20.20    | -19.60     | <b>-17.55</b>     | 8           |
|  | CH4                    | -20.84    | -20.24                               | -21.95    | -21.35     | <b>-17.75</b>     | 8           |
|  | CH7                    | -21.46    | -20.86                               | -21.48    | -20.88     | <b>-17.86</b>     | 8           |
| Note1:According Exploratory test, These data rate have the maximum output power      |                        |           |                                      |           |            |                   |             |
| Note2:Level=Read+ cable loss Total power=Chain1 Level +Chain2 Level (Linear)         |                        |           |                                      |           |            |                   |             |

## CHAIN1:

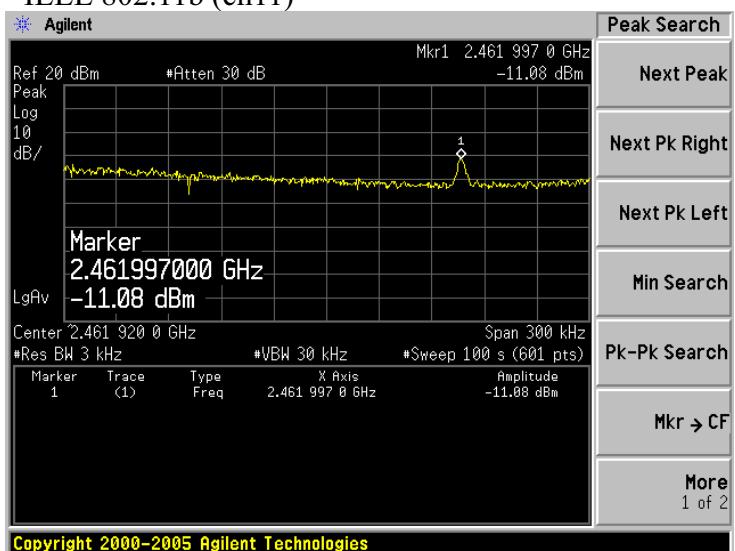
### IEEE 802.11b (ch1)



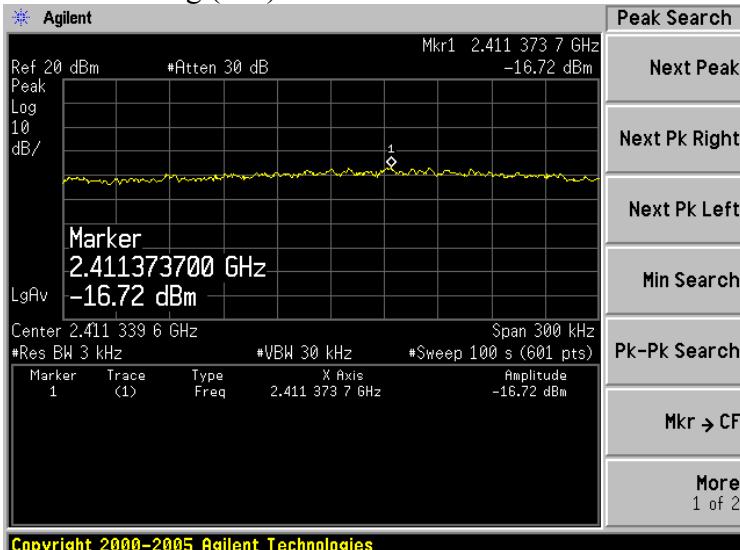
### IEEE 802.11b (ch6)



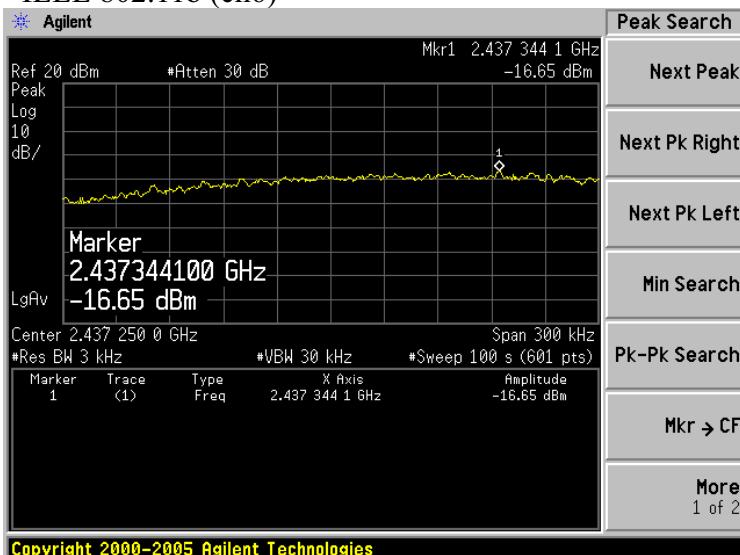
### IEEE 802.11b (ch11)



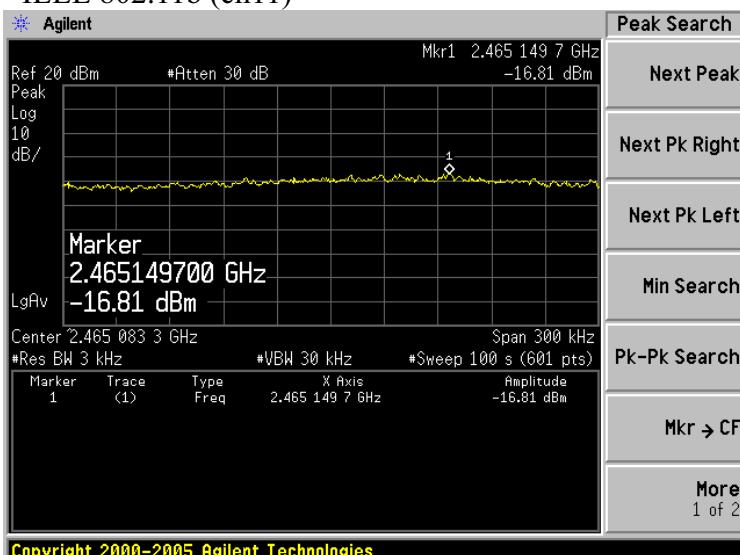
## IEEE 802.11g (ch1)



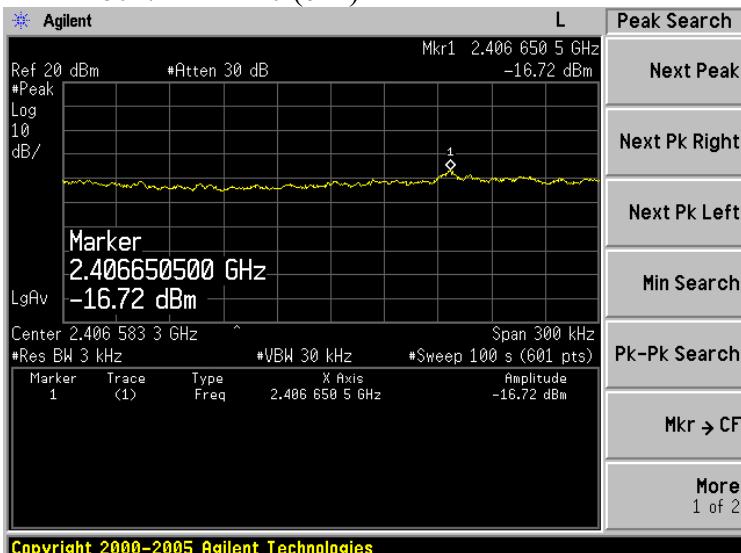
## IEEE 802.11b (ch6)



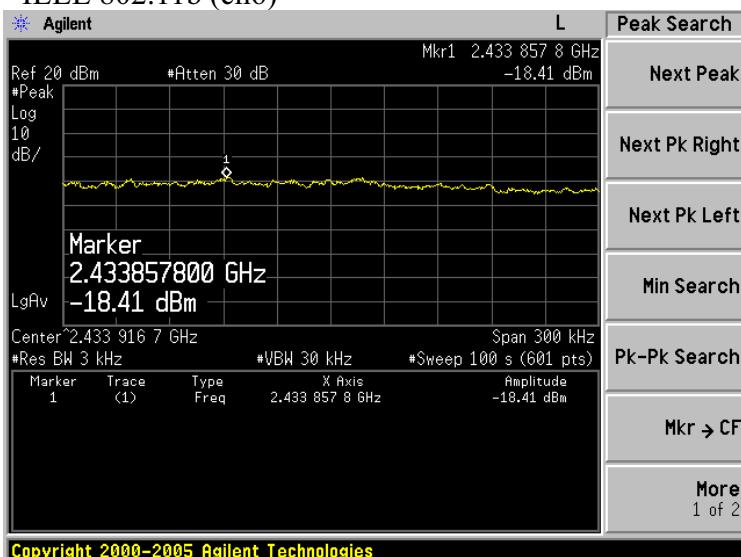
## IEEE 802.11b (ch11)



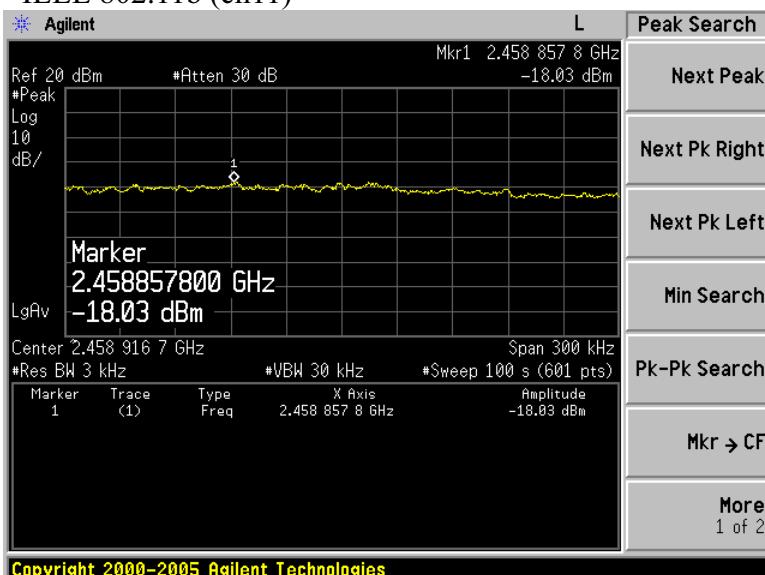
## IEEE 802.11n HT20 (ch1)



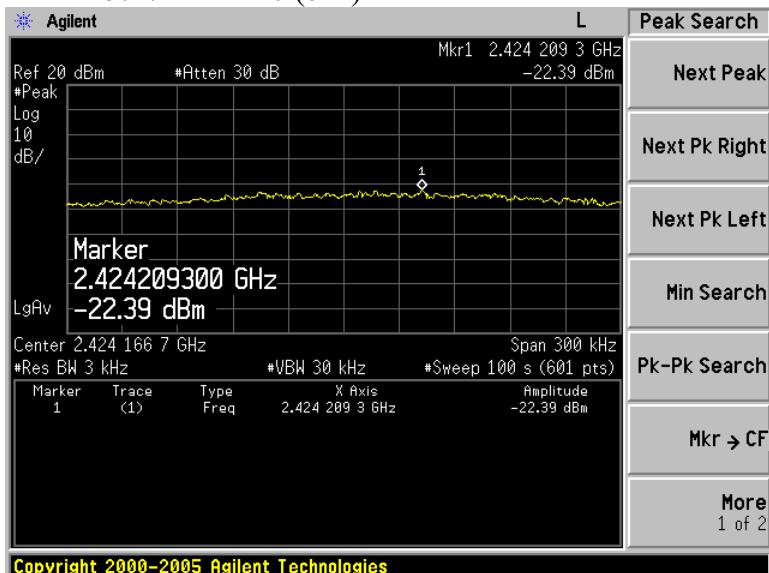
## IEEE 802.11b (ch6)



## IEEE 802.11b (ch11)

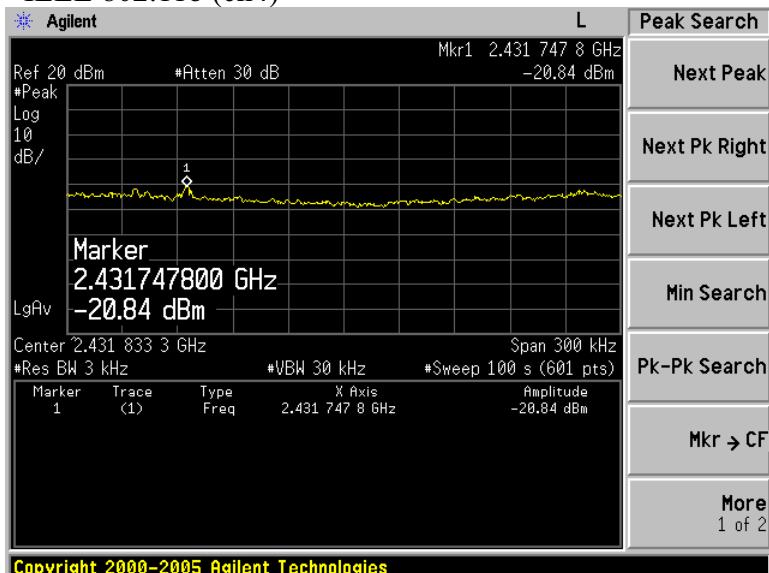


## IEEE 802.11n HT40 (ch1)



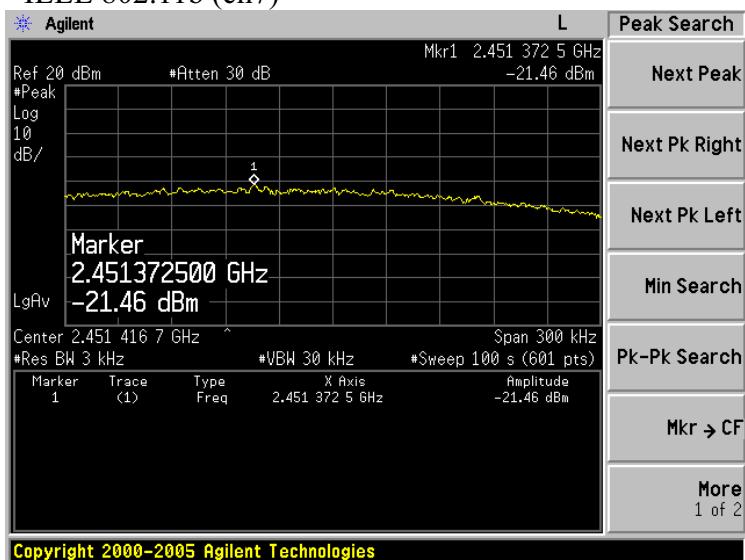
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## IEEE 802.11b (ch4)



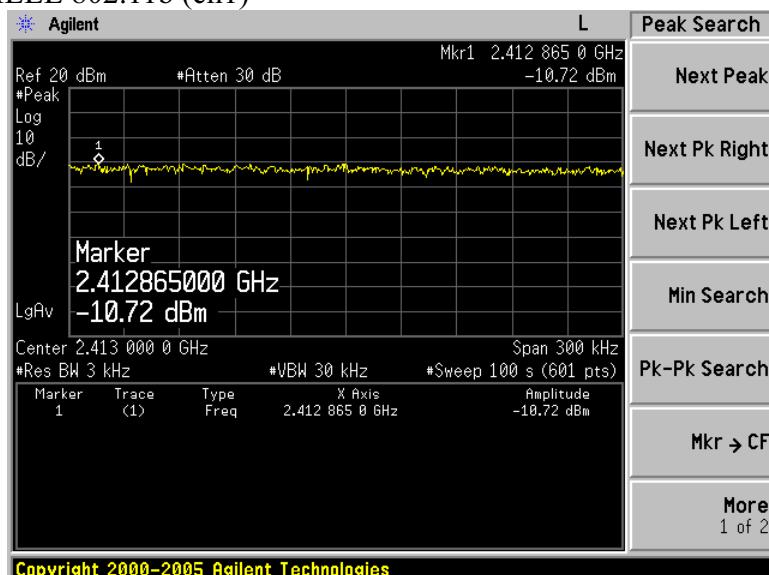
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## IEEE 802.11b (ch7)

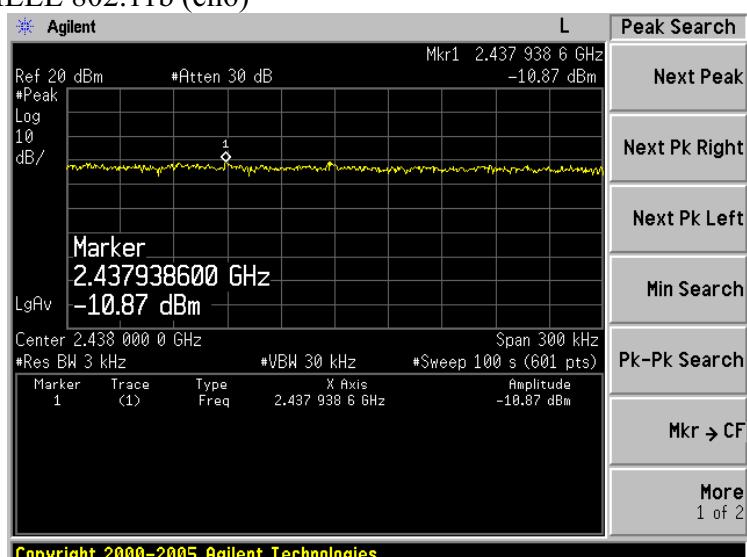


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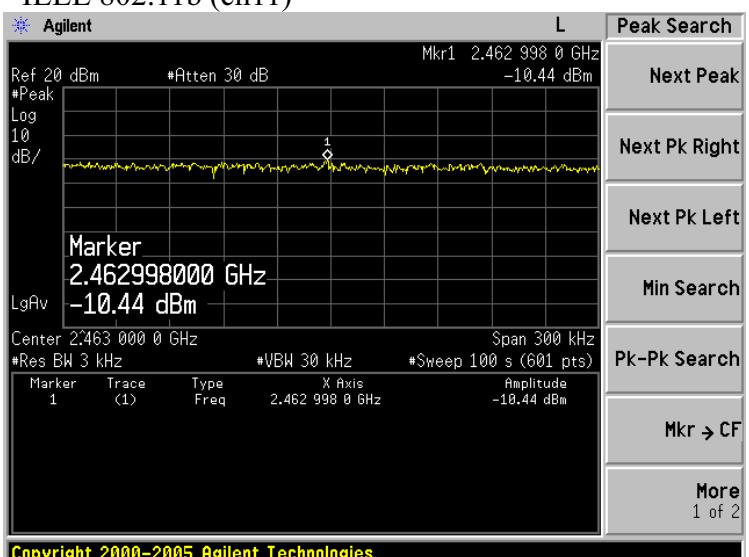
**CHAIN2:**  
IEEE 802.11b (ch1)



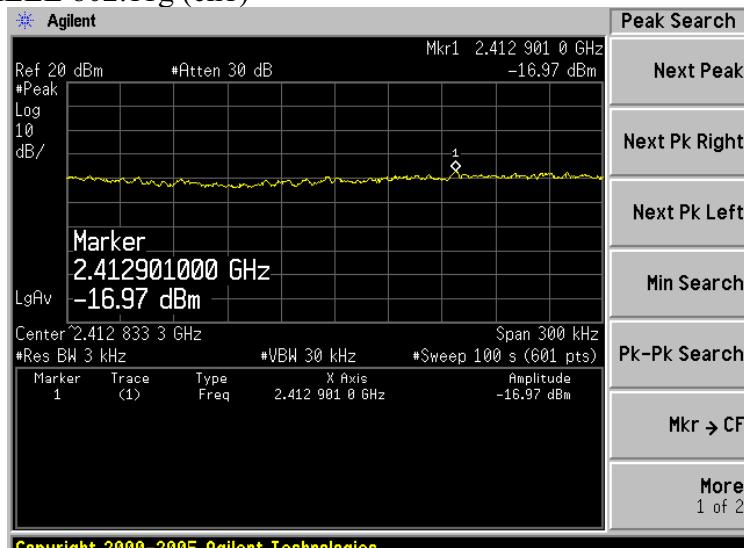
## IEEE 802.11b (ch6)



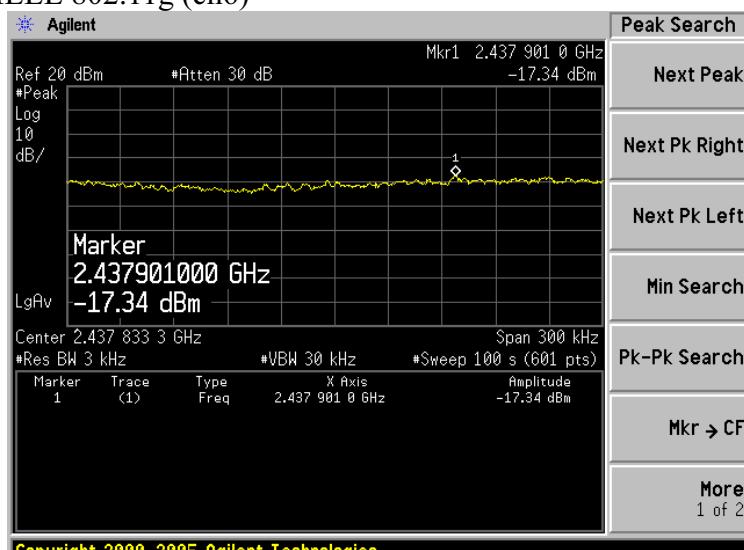
## IEEE 802.11b (ch11)



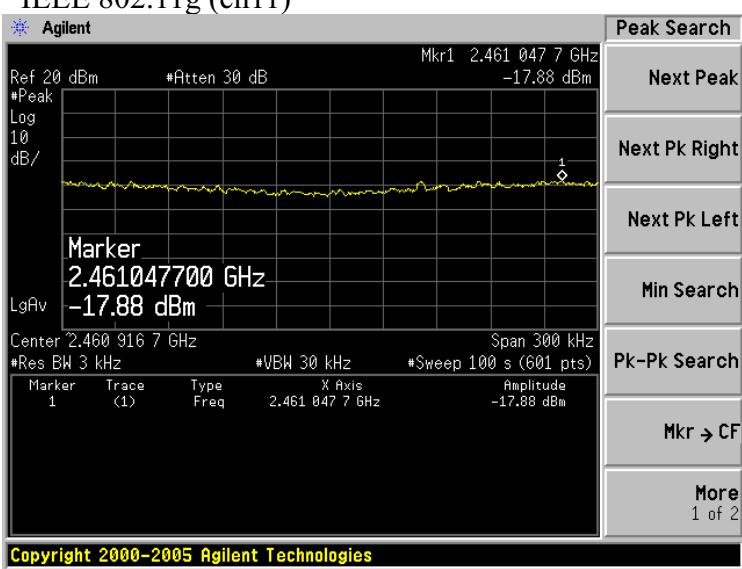
## IEEE 802.11g (ch1)



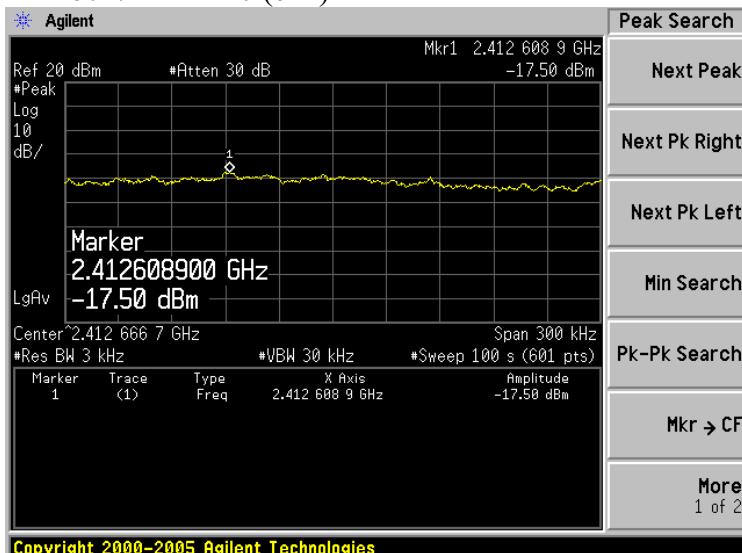
## IEEE 802.11g (ch6)



## IEEE 802.11g (ch11)

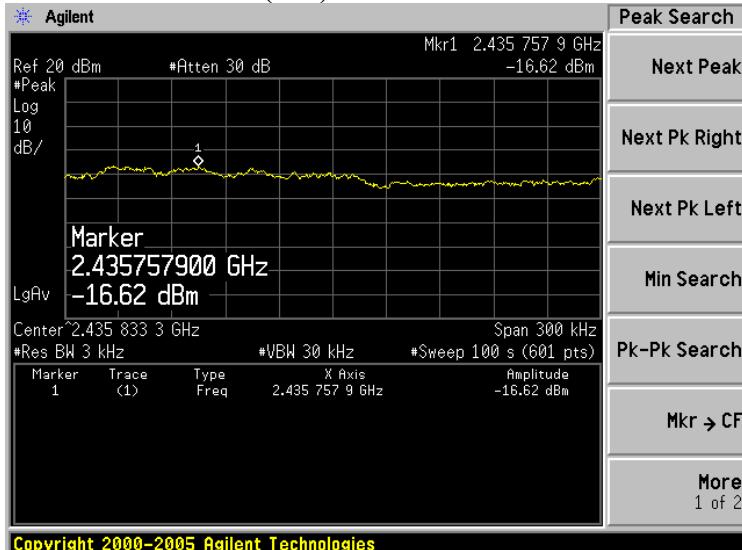


## IEEE 802.11n HT20 (ch1)



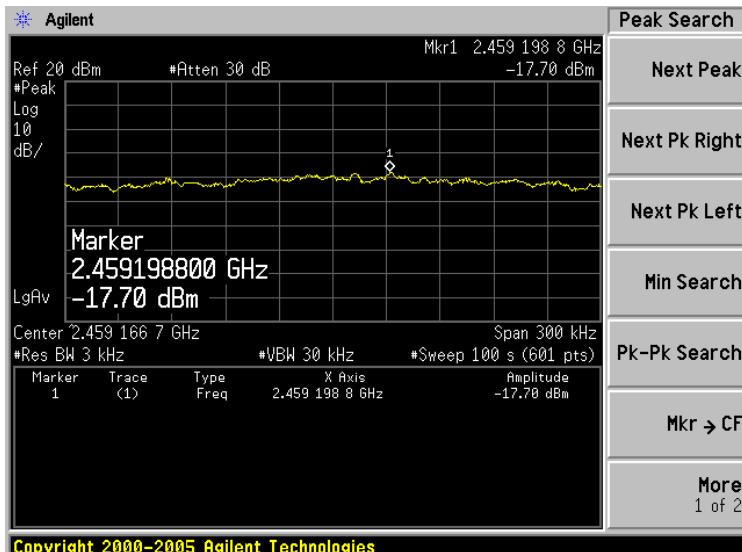
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## IEEE 802.11n HT20 (ch4)



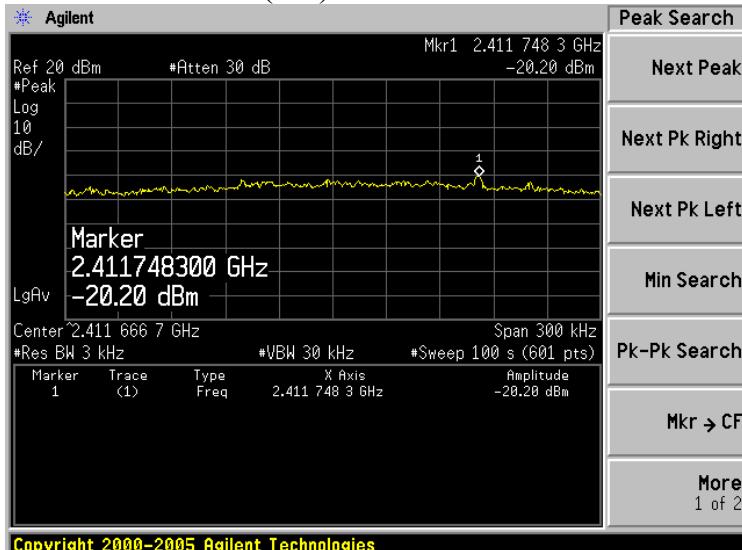
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## IEEE 802.11n HT20 (ch7)

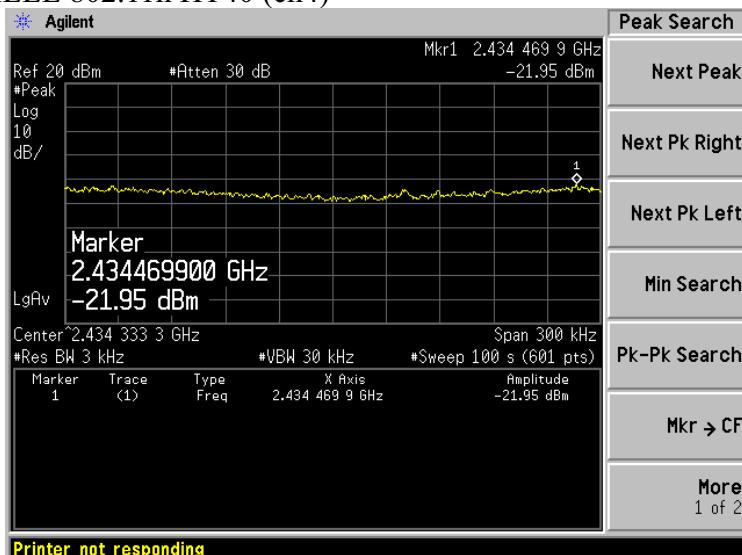


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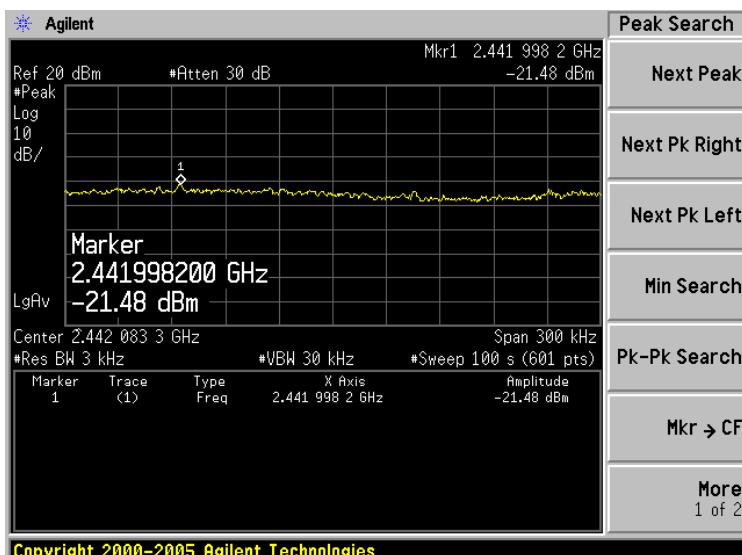
## IEEE 802.11n HT40 (ch1)



## IEEE 802.11n HT40 (ch4)



## IEEE 802.11n HT40 (ch7)



## 9. MPE ESTIMATION

### 9.1.Limit for General Population / Uncontrolled Exposures

| Frequency     | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|---------------|-------------------------------------|--------------------------|
| 300MHz~1.5GHz | F/1500                              | 30                       |
| 1.5GHz~100GHz | 1.0                                 | 30                       |

| Frequency (MHz) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|-----------------|-------------------------------------|--------------------------|
| 2412            | 1                                   | 30                       |
| 2437            | 1                                   | 30                       |
| 2462            | 1                                   | 30                       |

Note: F = Frequency in MHz

### 9.2.Estimation Result

| Mode              | CH           | Output power (dBm) | Output power (mW) | Antenna Gain (dBi) | MPE estimation result(mW/cm <sup>2</sup> ) |
|-------------------|--------------|--------------------|-------------------|--------------------|--|
| IEEE802. 11b      | CH1:2412MHz  | <b>20.75</b>       | 118. 85           | 3                  | 0. 047                                     |
|                   | CH6:2437MHz  | <b>20.78</b>       | 119. 67           | 3                  | 0. 048                                     |
|                   | CH11:2462MHz | <b>20.89</b>       | 122. 74           | 3                  | 0. 049                                     |
| IEEE802. 11g      | CH1:2412MHz  | <b>22.62</b>       | 182. 81           | 3                  | 0. 073                                     |
|                   | CH6:2437MHz  | <b>22.64</b>       | 183. 65           | 3                  | 0. 073                                     |
|                   | CH11:2462MHz | <b>22.57</b>       | 180. 72           | 3                  | 0. 072                                     |
| IEEE802. 11n HT20 | CH1:2412MHz  | <b>22.77</b>       | 189. 23           | 3                  | 0. 075                                     |
|                   | CH6:2437MHz  | <b>22.81</b>       | 190. 99           | 3                  | 0. 076                                     |
|                   | CH11:2462MHz | <b>22.88</b>       | 194. 09           | 3                  | 0. 077                                     |
| IEEE802. 11n HT40 | CH1:2422MHz  | <b>24.15</b>       | 260. 02           | 3                  | 0. 104                                     |
|                   | CH4:2437MHz  | <b>24.36</b>       | 272. 9            | 3                  | 0. 109                                     |
|                   | CH7:2452MHz  | <b>24.35</b>       | 272. 27           | 3                  | 0. 108                                     |

## 10. ANTENNA REQUIREMENT

### 10.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 10.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used for this product is antenna with SMA-B connector (see EUT photo) that no antenna other than that furnished by the responsible party shall be used with the device, The maximum peak gain of this antenna is only 3dBi.

## 11.DEVIATION TO TEST SPECIFICATIONS

[ NONE]