

# **FCC RF EXPOSURE REPORT**

**FCC ID: T58WF2411ER**

**Project No. : 1506C211**  
**Equipment : 150Mbps Wireless N Router**  
**Model : WF2411E**  
**Applicant : NETIS SYSTEMS CO., LTD**  
**Address : 4F&5F R&D Building, Oriental Cyberport,**  
**High-Tech Industrial Park, Nanshan,**  
**Shenzhen, China**

**According: : FCC Guidelines for Human Exposure IEEE**  
**C95.1**

**B T L I N C .**

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## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

| Ant. | Brand   | Model Name  | Antenna Type | Connector | Gain(dBi) | Note |
|------|---------|-------------|--------------|-----------|-----------|------|
| 1    | RF link | RF21C00283A | Dipole       | N/A       | 4.86      |      |

## TEST RESULTS

|                |                             |                    |         |
|----------------|-----------------------------|--------------------|---------|
| EUT :          | 150Mbps Wireless N Router   | Model Name :       | WF2411E |
| Temperature :  | 25 °C                       | Relative Humidity: | 55 %    |
| Test Voltage : | AC 120V/60Hz                |                    |         |
| Test Mode :    | TX B MODE /CH01, CH06, CH11 |                    |         |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|-----------------------------------------|--------------------------------------------------|-------------|
| 4.86               | 3.0620                 | 16.27                   | 42.3643                | 0.02581965                              | 1                                                | Complies    |
| 4.86               | 3.0620                 | 16.93                   | 49.3174                | 0.03005733                              | 1                                                | Complies    |
| 4.86               | 3.0620                 | 16.67                   | 46.4515                | 0.02831068                              | 1                                                | Complies    |

|                |                             |                    |         |
|----------------|-----------------------------|--------------------|---------|
| EUT :          | 150Mbps Wireless N Router   | Model Name :       | WF2411E |
| Temperature :  | 25 °C                       | Relative Humidity: | 55 %    |
| Test Voltage : | AC 120V/60Hz                |                    |         |
| Test Mode :    | TX G MODE /CH01, CH06, CH11 |                    |         |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|-----------------------------------------|--------------------------------------------------|-------------|
| 4.86               | 3.0620                 | 22.66                   | 184.5015               | 0.11244765                              | 1                                                | Complies    |
| 4.86               | 3.0620                 | 23.09                   | 203.7042               | 0.12415104                              | 1                                                | Complies    |
| 4.86               | 3.0620                 | 22.85                   | 192.7525               | 0.11747633                              | 1                                                | Complies    |

|                |                                        |                    |         |
|----------------|----------------------------------------|--------------------|---------|
| EUT :          | 150Mbps Wireless N Router              | Model Name :       | WF2411E |
| Temperature:   | 25 °C                                  | Relative Humidity: | 55 %    |
| Test Voltage : | AC 120V/60Hz                           |                    |         |
| Test Mode :    | TX N-20M MODE_ Total /CH01, CH06, CH11 |                    |         |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|-----------------------------------------|--------------------------------------------------|-------------|
| 4.86               | 3.0620                 | 22.64                   | 183.6538               | 0.11193100                              | 1                                                | Complies    |
| 4.86               | 3.0620                 | 22.45                   | 175.7924               | 0.10713969                              | 1                                                | Complies    |
| 4.86               | 3.0620                 | 22.03                   | 159.5879               | 0.09726361                              | 1                                                | Complies    |

|                |                                        |                    |         |
|----------------|----------------------------------------|--------------------|---------|
| EUT :          | 150Mbps Wireless N Router              | Model Name :       | WF2411E |
| Temperature:   | 25 °C                                  | Relative Humidity: | 55 %    |
| Test Voltage : | AC 120V/60Hz                           |                    |         |
| Test Mode :    | TX N-40M MODE_ Total /CH03, CH06, CH09 |                    |         |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|-----------------------------------------|--------------------------------------------------|-------------|
| 4.86               | 3.0620                 | 22.59                   | 181.5516               | 0.11064973                              | 1                                                | Complies    |
| 4.86               | 3.0620                 | 22.86                   | 193.1968               | 0.11774714                              | 1                                                | Complies    |
| 4.86               | 3.0620                 | 22.42                   | 174.5822               | 0.10640214                              | 1                                                | Complies    |

Note: the calculated distance is 20 cm.