

# **FCC RF EXPOSURE REPORT**

**FCC ID: T58WF2222R**

**Project No. : 1502C166**  
**Equipment : 300Mbps Wireless N Ceiling-Mounted Access Point**  
**Model : WF2222**  
**Applicant : NETIS SYSTEMS CO., LTD**  
**Address : 4F&5F R&D Building, Oriental Cyberport, High-Tech Industrial Park, Nanshan, Shenzhen, China**

**Accordinging: : 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  |
|------|--|---------------------|--------------|-----------|-----------|-------|
| 2    |   | RGFRA1903<br>041A1T | Chip         | N/A       | 2.00      | TX/RX |
| 3    |  | RGFRA1903<br>041A1T | Chip         | N/A       | 2.00      | TX/RX |

## TEST RESULTS

|                |  |                    |        |
|----------------|--|--------------------|--------|
| EUT :          | 300Mbps Wireless N<br>Ceiling-Mounted Access Point | Model Name :       | WF2222 |
| Temperature :  | 25 °C  | Relative Humidity: | 61 %   |
| 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 |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2.00               | 1.5849                 | 16.86                   | 48.5289                | 0.01530913                              | 1  | Complies    |
| 2.00               | 1.5849                 | 16.85                   | 48.4172                | 0.01527391                              | 1  | Complies    |
| 2.00               | 1.5849                 | 16.75                   | 47.3151                | 0.01492624                              | 1  | Complies    |

|                |  |                    |        |
|----------------|--|--------------------|--------|
| EUT :          | 300Mbps Wireless N<br>Ceiling-Mounted Access Point | Model Name :       | WF2222 |
| Temperature :  | 25 °C  | Relative Humidity: | 61 %   |
| 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 |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2.00               | 1.5849                 | 22.04                   | 159.9558               | 0.05046036                              | 1  | Complies    |
| 2.00               | 1.5849                 | 22.21                   | 166.3413               | 0.05247475                              | 1  | Complies    |
| 2.00               | 1.5849                 | 22.08                   | 161.4359               | 0.05092727                              | 1  | Complies    |

|                |  |                    |        |
|----------------|--|--------------------|--------|
| EUT :          | 300Mbps Wireless N<br>Ceiling-Mounted Access Point | Model Name :       | WF2222 |
| Temperature:   | 25 °C  | Relative Humidity: | 61 %   |
| 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 |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2.00               | 1.5849                 | 22.21                   | 166.3413               | 0.05247475                              | 1  | Complies    |
| 2.00               | 1.5849                 | 22.09                   | 161.8080               | 0.05104467                              | 1  | Complies    |
| 2.00               | 1.5849                 | 22.22                   | 166.7247               | 0.05259572                              | 1  | Complies    |

|                |  |                    |        |
|----------------|--|--------------------|--------|
| EUT :          | 300Mbps Wireless N<br>Ceiling-Mounted Access Point | Model Name :       | WF2222 |
| Temperature:   | 25 °C  | Relative Humidity: | 61 %   |
| 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 |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2.00               | 1.5849                 | 21.50                   | 141.2538               | 0.04456053                              | 1  | Complies    |
| 2.00               | 1.5849                 | 21.45                   | 139.6368               | 0.04405045                              | 1  | Complies    |
| 2.00               | 1.5849                 | 21.50                   | 141.2538               | 0.04456053                              | 1  | Complies    |

Note: the calculated distance is 20 cm.