



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: V7TA8

Project No. : 1312C020
Equipment : Wireless N150 Portable Router
Model : A8
Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD.
Address : Tenda Industrial Park, No.34-1, Shilong Rd., Shiyan Town, Bao'an District, Shenzhen, P.R. China 518108

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

Neutron Engineering Inc.

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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) |
|------|-------|------------|-----------------|-----------|------------|
| 1 | N/A | N/A | Printed Antenna | N/A | 3 |



TEST RESULTS

| | | | |
|--------------|-------------------------------|--------------------|--------------|
| EUT: | Wireless N150 Portable Router | Model Name : | A8 |
| Temperature: | 24 °C | Relative Humidity: | 60 % |
| Pressure: | 1016 hPa | 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 ²) | Limit of Power Density (S) (mW/cm ²) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3 | 1.9953 | 17.05 | 50.6991 | 0.02013494 | 1 | Complies |
| 3 | 1.9953 | 15.75 | 37.5837 | 0.01492624 | 1 | Complies |
| 3 | 1.9953 | 15.49 | 35.3997 | 0.01405887 | 1 | Complies |

| | | | |
|--------------|-------------------------------|--------------------|--------------|
| EUT: | Wireless N150 Portable Router | Model Name : | A8 |
| Temperature: | 24 °C | Relative Humidity: | 60 % |
| Pressure: | 1016 hPa | 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 ²) | Limit of Power Density (S) (mW/cm ²) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3 | 1.9953 | 23.61 | 229.6149 | 0.09119066 | 1 | Complies |
| 3 | 1.9953 | 23.91 | 246.0368 | 0.09771255 | 1 | Complies |
| 3 | 1.9953 | 23.83 | 241.5461 | 0.09592910 | 1 | Complies |



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| | | | |
|--------------|---------------------------------|--------------------|--------------|
| EUT: | Wireless N150 Portable Router | Model Name : | A8 |
| Temperature: | 24 °C | Relative Humidity: | 60 % |
| Pressure: | 1016 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | TX N-20M MODE /CH01, CH06, CH11 | | |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm ²) | Limit of Power Density (S) (mW/cm ²) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3 | 1.9953 | 23.01 | 199.9862 | 0.07942375 | 1 | Complies |
| 3 | 1.9953 | 23.09 | 203.7042 | 0.08090034 | 1 | Complies |
| 3 | 1.9953 | 23.16 | 207.0141 | 0.08221487 | 1 | Complies |

| | | | |
|--------------|---------------------------------|--------------------|--------------|
| EUT: | Wireless N150 Portable Router | Model Name : | A8 |
| Temperature: | 24 °C | Relative Humidity: | 60 % |
| Pressure: | 1016 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | TX N-40M MODE /CH03, CH06, CH09 | | |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm ²) | Limit of Power Density (S) (mW/cm ²) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3 | 1.9953 | 20 | 100.0000 | 0.03971462 | 1 | Complies |
| 3 | 1.9953 | 23.42 | 219.7860 | 0.08728716 | 1 | Complies |
| 3 | 1.9953 | 21.07 | 127.9381 | 0.05081014 | 1 | Complies |

The calculated distance is 20 cm