



**Neutron Engineering Inc.**

# **FCC RF EXPOSURE REPORT**

**FCC ID: V7TW303RV3**

**Project No. : 1309C003**  
**Equipment : Wireless N300 Home Router**  
**Model : W303R**  
**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**

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## **MPE CALCULATION METHOD:**

Calculation Method of RF Safety Distance:

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

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	S/N	Antenna Type	Connector	Gain (dBi)
0	Tenda	321A0000001	Dipole	N/A	5.24
1	Tenda	321A0000001	Dipole	N/A	5.24
2	Tenda	321A0000001	Dipole	N/A	5.24



## TEST RESULTS

EUT:	Wireless N300 Home Router	Model Name :	W303R
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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
5.24	3.3420	18.23	66.5273	0.04425378	1	Complies
5.24	3.3420	18.02	63.3870	0.04216483	1	Complies
5.24	3.3420	18.53	71.2853	0.04741878	1	Complies

EUT:	Wireless N300 Home Router	Model Name :	W303R
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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
5.24	3.3420	20.93	123.8797	0.08240439	1	Complies
5.24	3.3420	20.98	125.3141	0.08335859	1	Complies
5.24	3.3420	21.01	126.1828	0.08393641	1	Complies



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EUT:	Wireless N300 Home Router	Model Name :	W303R
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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
5.24	3.3420	24.05	254.0973	0.16902478	1	Complies
5.24	3.3420	24.02	252.3481	0.16786122	1	Complies
5.24	3.3420	24.00	251.1886	0.16708997	1	Complies

EUT:	Wireless N300 Home Router	Model Name :	W303R
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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
5.24	3.3420	23.50	223.8721	0.14891909	1	Complies
5.24	3.3420	23.55	226.4644	0.15064349	1	Complies
5.24	3.3420	23.34	215.7744	0.14353254	1	Complies

Note: the calculation distance is 20 cm.