



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: V7TW312A

Project No. : 1403C031
Equipment : Wireless N300 Wall Plate Access Point
Model : W312A
Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD
**Address : 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan
Road, Nanshan District, Shenzhen, China. 518052**

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)	Note	Length
1	Tenda	Q5106	Internal	N/A	3.81	TX/RX	90mm
1	Tenda	Q5101	Internal	N/A	3.81	TX/RX	70mm



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TEST RESULTS

EUT:	Wireless N300 Wall Plate Access Point	Model Name :	W312A
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 ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.81	2.4044	20.26	106.1696	0.05081014	1	Complies
3.81	2.4044	20.23	105.4387	0.05046036	1	Complies
3.81	2.4044	20.17	103.9920	0.04976802	1	Complies

EUT:	Wireless N300 Wall Plate Access Point	Model Name :	W312A
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 ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.81	2.4044	20.11	102.5652	0.04908518	1	Complies
3.81	2.4044	20.17	103.9920	0.04976802	1	Complies
3.81	2.4044	20.32	107.6465	0.05151698	1	Complies



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EUT:	Wireless N300 Wall Plate Access Point	Model Name :	W312A
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 ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.81	2.4044	23.18	207.9697	0.09952917	1	Complies
3.81	2.4044	23.25	211.3489	0.10114639	1	Complies
3.81	2.4044	23.30	213.7962	0.10231761	1	Complies

EUT:	Wireless N300 Wall Plate Access Point	Model Name :	W312A
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 ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.81	2.4044	21.23	132.7394	0.06352583	1	Complies
3.81	2.4044	21.53	142.2329	0.06806916	1	Complies
3.81	2.4044	21.59	144.2115	0.06901609	1	Complies

The calculated distance is 20 cm