

## FCC RF EXPOSURE REPORT

**FCC ID: V7TA301** 

**Project No.** : 1404C109

**Equipment**: Wireless N300 Universal Range Extender

**Model** : **A301** 

Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD : 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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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	Connecto r	Gain (dBi)	Note
1	Tenda	NA	Dipole	N/A	2.25	TX/RX
1	Tenda	NA	Dipole	N/A	2.25	TX/RX

EUT:	Wireless N300 Universal Range Extender	Model Name :	A301
Temperature:	25 ℃	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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2.25	1.6788	21.3	134.8963	0.04507652	1	Complies
2.25	1.6788	20.8	120.2264	0.04017449	1	Complies
2.25	1.6788	20.6	114.8154	0.03836634	1	Complies

EUT:	Wireless N300 Universal Range Extender	Model Name :	A301
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX G MODE /CH01, CH06, CH1	1	

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/cm²)	Test Result
2.25	1.6788	21.2	131.8257	0.04405045	1	Complies
2.25	1.6788	22.2	165.9587	0.05545623	1	Complies
2.25	1.6788	21.3	134.8963	0.04507652	1	Complies

EUT:	Wireless N300 Universal Range Extender	Model Name :	A301		
Temperature:	25 ℃	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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2.25	1.6788	24.46	279.2544	0.09331477	1	Complies
2.25	1.6788	25.36	343.5579	0.11480224	1	Complies
2.25	1.6788	24.36	272.8978	0.09119066	1	Complies

EUT:	Wireless N300 Universal Range Extender	Model Name :	A301		
Temperature:	25 ℃	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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2.25	1.6788	22.81	190.9853	2.25	1	Complies
2.25	1.6788	22.76	188.7991	2.25	1	Complies
2.25	1.6788	22.66	184.5015	2.25	1	Complies

The calculated distance is 20 cm