

## FCC RF EXPOSURE REPORT

**FCC ID: V7TA301V2** 

**Project No. : 1509C314** 

**Equipment**: Wireless N300 Universal Range Extender

Model : A301

Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address : 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan

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

# BTL 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.	Manufacturer	Model Name	Antenna Type	Connector	Gain(dBi)
1	Tenda	N/A	Dipole	N/A	2.25
2	Tenda	N/A	Dipole	N/A	2.25



# **TEST RESULTS**

F   J   1	Wireless N300 Universal Range Extender	Model Name :	A301		
Temperature:	<b>25</b> ℃	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	22.79	190.1078	0.06352583	1	Complies
2.25	1.6788	22.59	181.5516	0.06066670	1	Complies
2.25	1.6788	21.61	144.8772	0.04841170	1	Complies

EUT:	Wireless N300 Universal Range Extender	Model Name :	A301		
Temperature:	<b>25</b> ℃	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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2.25	1.6788	22.03	159.5879	0.05332740	1	Complies
2.25	1.6788	24.43	277.3320	0.09267239	1	Complies
2.25	1.6788	21.15	130.3167	0.04354621	1	Complies



F	Wireless N300 Universal Range Extender	Model Name :	A301		
Temperature:	<b>25</b> ℃	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	23.90	245.4709	0.08202578	1	Complies
2.25	1.6788	26.26	422.6686	0.14123761	1	Complies
2.25	1.6788	23.72	235.5049	0.07869559	1	Complies

	Wireless N300 Universal Range Extender	Model Name :	A301		
Temperature:	<b>25</b> ℃	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	22.09	161.8080	0.05406925	1	Complies
2.25	1.6788	26.15	412.0975	0.13770521	1	Complies
2.25	1.6788	22.34	171.3957	0.05727306	1	Complies

Note: the calculated distance is 20 cm.