FCC RF EXPOSURE REPORT

FCC ID: V7TA9

Project No.	**: 1606C194**
Equipment	**: Wireless N300 Universal Range Extender**
Model	**: A9**
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**

BTL INC.

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, China.
TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

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	Tenda	N/A	Dipole	N/A	3
2	Tenda	N/A	Dipole	N/A	3

Note:
(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R). All transmit signals are completely uncorrelated, then, Directional gain=G_{ANT}, that is Directional gain=3.

Operating Mode / TX Mode	1TX	2TX
802.11b	V (ANT 1 or ANT 2)	-
802.11g	V (ANT 1 or ANT 2)	-
802.11n(20MHz)	-	V (ANT 1 + ANT 2)
802.11n(40MHz)	-	V (ANT 1 + ANT 2)

TEST RESULTS

EUT：	Wireless N300 Universal Range Extender	Model Name :	A9
Temperature：	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode ：	TX B MODE_Ant 2 /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	15.71	37.2392	0.01479	1	Complies
3	1.9953	17.24	52.9663	0.02104	1	Complies
3	1.9953	18.66	73.4514	0.02917	1	Complies

EUT：	Wireless N300 Universal Range Extender	Model Name :	A9
Temperature：	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode ：	TX G MODE_Ant 2 /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	25.87	386.3670	0.15344	1	Complies
3	1.9953	25.82	381.9443	0.15169	1	Complies
3	1.9953	25.69	370.6807	0.14721	1	Complies

EUT：	Wireless N300 Universal Range Extender	Model Name :	A9
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/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
3	1.9953	28.12	648.6344	0.25760	1	Complies
3	1.9953	29.27	845.2788	0.33570	1	Complies
3	1.9953	27.53	566.2393	0.22488	1	Complies

EUT：	Wireless N300 Universal Range Extender	Model Name :	A9
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/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
3	1.9953	26.76	474.2420	0.18834	1	Complies
3	1.9953	27.37	545.7579	0.21675	1	Complies
3	1.9953	22.88	194.0886	0.07708	1	Complies

Note: the calculated distance is 20 cm.