

FCC RF EXPOSURE REPORT

FCC ID: V7TFH456

Project No. : 1506C024

Equipment: 300Mbps Ultimate Coverage Wi-Fi Router

Model: FH456

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)	Note
CON0	N/A	N/A	Dipole	N/A	5.00	TX/RX
CON1/	NI/A	N/A	Dipolo	N/A	5.00	TX/RX
CON2	N/A	IN/A	Dipole	IN/A	5.00	IA/RA
CON0T	N/A	N/A	Dipole	N/A	N/A	N/A
CON1T	N/A	N/A	Dipole	N/A	N/A	N/A

Note: Only antenna CON0 and CON1/CON2 are used, antenna CON0T and CON1T do not work.



TEST RESULTS

IF()	300Mbps Ultimate Coverage Wi-Fi Router	Model Name :	FH456		
Temperature:	25 ℃	Relative Humidity:	60 %		
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
5	3.1623	18.62	72.7780	0.04580895	1	Complies
5	3.1623	18.38	68.8652	0.04334613	1	Complies
5	3.1623	18.67	73.6207	0.04633940	1	Complies

	300Mbps Ultimate Coverage Wi-Fi Router	Model Name :	FH456		
Temperature:	25 ℃	Relative Humidity:	60 %		
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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
5	3.1623	18.98	79.0679	0.04976802	1	Complies
5	3.1623	18.38	68.8652	0.04334613	1	Complies
5	3.1623	18.71	74.3019	0.04676817	1	Complies



I I I I I	300Mbps Ultimate Coverage Wi-Fi Router	Model Name :	FH456		
Temperature:	25 ℃	Relative Humidity:	60 %		
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
5	3.1623	22.69	185.7804	0.11693657	1	Complies
5	3.1623	22.07	161.0646	0.10137955	1	Complies
5	3.1623	22.36	172.1869	0.10838031	1	Complies

	300Mbps Ultimate Coverage Wi-Fi Router	Model Name :	FH456		
Temperature:	25 ℃	Relative Humidity:	60 %		
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
5	3.1623	22.58	181.1340	0.11401195	1	Complies
5	3.1623	22.41	174.1807	0.10963529	1	Complies
5	3.1623	22.33	171.0015	0.10763422	1	Complies

Note: the calculated distance is 20 cm.