

# FCC RF EXPOSURE REPORT

**FCC ID: V7TI21**

**Project No. : 1709C145**  
**Equipment : Wireless Dual Band Ceiling Access Point**  
**Model : i21**  
**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 & FCC Part 2.1091**

**B T L I N C .**

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:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

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

2.4G WIFI:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	N/A	N/A	Integral Antenna	N/A	4.5
2	N/A	N/A	Integral Antenna	N/A	4.5

5G WIFI:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	N/A	N/A	Integral Antenna	N/A	3.5
2	N/A	N/A	Integral Antenna	N/A	3.5

# TEST RESULTS

EUT :	Wireless Dual Band Ceiling Access Point	Model Name :	i21
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		

## 2.4G WIFI

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/cm <sup>2</sup> )	Test Result
4.5	2.8184	25.98	396.2780	0.22231	1	Complies

## 5G Band UNII-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/cm <sup>2</sup> )	Test Result
3.5	2.2387	27.58	572.7960	0.25524	1	Complies

## 5G Band UNII-3

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/cm <sup>2</sup> )	Test Result
3.5	2.2387	29.65	922.5714	0.41110	1	Complies

### For 2.4G+5G simultaneous transmission MPE:

$$0.22231/1+0.41110/1=0.63341$$

Note: the calculated distance is 20 cm.