



# RF EXPOSURE REPORT

Applicant	TP-Link Technologies Co., Ltd.
Address	Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China

Manufacturer or Supplier	TP-Link Technologies Co., Ltd.
Address	Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Product	300Mbps Wireless N Ceiling Mount Access Point
Brand Name	tp-link
Model	EAP110
Additional Model & Model Difference	N/A
Date of tests	Nov. 02, 2017 ~ Dec. 14, 2017

- ☒ FCC Part 2 (Section 2.1091)
- ☒ 447498 D01 General RF Exposure Guidance v06
- ☒ IEEE C95.1
- ☒ KDB 662911 D01 Multiple Transmitter Output v02r01

**CONCLUSION:** The submitted sample was found to COMPLY with the test requirement

Tested by Harry Li Project Engineer/ EMC Department	Approved by Glyn He Supervisor/ EMC Department
	 Date: Dec. 29, 2017

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Test Report No.: FS171102N029

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS171102N029	Original release	Dec. 29, 2017

## 1. CERTIFICATION

**PRODUCT:** 300Mbps Wireless N Ceiling Mount Access Point  
**BRAND NAME:** tp-link  
**MODEL NO.:** EAP110  
**ADDITIONAL MODEL:** N/A  
**DEVIATION AMONG MODELS** Model name only  
**FCC ID:** TE7EAP110V4  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**APPLICANT:** TP-Link Technologies Co., Ltd.  
**TESTED DATE:** Dec. 14, 2017  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
KDB 447498 D01  
IEEE C95.1

## 2. RF EXPOSURE LIMIT

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm <sup>2</sup> )	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$R$  = distance between observation point and center of the radiator in cm

## 4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

## 5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Frequency Band	Antenna 0 Peak Gain (dBi)	Antenna 1 Peak Gain (dBi)	Total Gain (dBi)	Antenna Type
2.4GHz	4	4	7.01	Dipole Antenna

Note: 2.4GHz: Total gain=4dBi+10log(2)=7.01dBi

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
WLAN 2.4GHz	290.40	4	20	0.14512	1.0

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