

# 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 Outdoor Access Point
Brand Name	N/A
Model	EAP110-Outdoor
Additional Model & Model Difference	N/A
Date of tests	Oct. 20, 2017 ~ Nov. 22, 2017

☒ FCC Part 2 (Section 2.1091)

☒ KDB 447498 D01

☒ IEEE C95.1

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

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Supervisor / EMC Department




Date: Nov. 28, 2017

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## TABLE OF CONTENTS

RELEASE CONTROL RECORD .....	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT .....	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION .....	5
5. ANTENNA GAIN .....	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



Test Report No.: FS171020N049

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS171020N049	Original release	Nov. 28, 2017

## 1. CERTIFICATION

<b>FCC ID:</b>	TE7EAP110ODV3
<b>PRODUCT:</b>	300Mbps Wireless N Outdoor Access Point
<b>BRAND NAME:</b>	tp-link
<b>MODEL NO.:</b>	EAP110-Outdoor
<b>ADDITIONAL NO.:</b>	N/A
<b>TEST SAMPLE:</b>	Engineering Sample
<b>APPLICANT:</b>	TP-Link Technologies Co., Ltd.
<b>STANDARDS:</b>	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:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0&1	3	Dipole Antenna

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
802.11b	2412-2462	25	+3	28	22
802.11g	2412-2462	25	+3	28	22
802.11n(HT20)	2412-2462	25	+3	28	22
802.11n(HT40)	2422-2452	21	+3	24	21

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11b	2437	23.70
802.11g	2437	23.38
802.11n(HT20)	2437	23.50
802.11n(HT40)	2437	19.31

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2412-2462	23.70	3	20	0.09305	1.0

--- END ---