RF EXPOSURE REPORT

Applicant	Hangzhou Tuya Information Technology Co., Ltd.
Address	Room701, Building3, More Center,No.87 GuDun Road, Hangzhou, Zhejiang, China

Manufacturer or Supplier	Hangzhou Tuya Information Technology Co., Ltd.
Address	Room701, Building3, More Center,No.87 GuDun Road, Hangzhou, Zhejiang, China
Product	Tuya Zigbee Smart Hub Plus
Brand Name	N/A
Model	THP12-Z
Additional Model & Model Difference	N/A
Date of tests	Jul. 16, 2020 ~ Dec. 18, 2020

☒ **FCC Part 2 (Section 2.1091)**
☒ **KDB 447498 D01**
☒ **IEEE C95.1**

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

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Dec. 30, 2020

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM200716N016	Original release	Dec. 30, 2020

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1. CERTIFICATION

PRODUCT:	Tuya Zigbee Smart Hub Plus
BRAND NAME:	N/A
MODEL NO.:	THP12-Z
ADDITIONAL MODEL:	N/A
FCC ID:	2ANDL-THP12-Z
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	Hangzhou Tuya Information Technology Co., Ltd.
TESTED DATES:	Jul. 16, 2020 ~ Dec. 18, 2020
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^2)	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

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = 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 Gain (dBi)	Antenna Type
Wi-Fi 2.4GHz	3.3(CHAIN 1)	FPCB Antenna
	-0.4(CHAIN 2)	FPCB Antenna
ZIGBEE	3.0	FPCB 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	2412-2462MHz	16	+-1	15	17
802.11g	2412-2462MHz	16	+-1	15	17
802.11n HT20	2412-2462MHz	15	+-1	14	16
802.11n HT40	2422-2452MHz	15	+-1	14	16
ZIGBEE	2405-2480MHz	9	+-1	8	10

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11b	2412	16.28
802.11g	2437	15.74
802.11n HT20	2462	15.29
802.11n HT40	2422	15.47
ZIGBEE	2405	8.87

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
Wi-Fi 2.4GHz	17	3.3	20	0.021317	1.0
ZIGBEE	10	3.0	20	0.003969	1.0

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