

Safety Human Exposure

1.1 Radio Frequency Exposure Compliance

1.1.1 Electromagnetic Fields

RESULT:

Pass

Test item	: WiFi Stick
Identification / Type No.	: Pyiot-wifi
FCC ID	: 2AYEFPYIOT-001
Test standard	: CFR47 FCC Part 2: Section 2.1091 CFR47 FCC Part 1: Section 1.1310 FCC KDB Publication 447498 D01 V06

➤ Product Classification

This device defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the RF source's radiating structure(s) and the body of the user or nearby persons.

Max 0.10 dBi

➤ FCC Radio Frequency Exposure Limit

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)
300-1,500	--	--	f/1500
1,500-100,000	--	--	1.0

➤ Radio Frequency Exposure Calculation Formula

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

where: S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

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 (appropriate units, e.g., cm)

or:

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

where: EIRP = equivalent (or effective) isotropically radiated power

a) EUT RF Exposure Evaluation standalone operations

Mode	*Measured RF Output Power (dBm)	EIRP (dBm)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
BLE	6.1	6.2	20	0.00083	1
Wi-Fi	18.2	18.3	20	0.01315	1

Note:

RF Output Power: Refer CN25LV1W 001

BLE, and Wi-Fi share one RF chip and antenna, so no need to evaluation simultaneous transmission.

➤ **Conclusion**

The distance between antenna and human is larger than 20 cm in the normal use.

Therefore, the maximum calculations result of above are meet the requirement of Radio Frequency Exposure limit.