Safety Human Exposure

1.1 Radio Frequency Exposure Compliance

1.1.1 Electromagnetic Fields

RESULT: **Pass**

Test Specification

Test item	:	3D Printer
Identification / Type No.	:	AccuFab-L4D, AccuFab-L4K
FCC ID	:	2AMG4-L4DL4K
Test standard	:	CFR47 FCC Part 2: Section 2.1091 CFR47 FCC Part 1: Section 1.1310 FCC KDB Publication 447498 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 20 cm is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons.

Max 1.00 dBi for 2.4GHz Wi-Fi

➢ **Radio Frequency Exposure Limit**

For FCC:

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/cm^2)
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	Frequency [MHz]	*Measured RF Output Power [dBm]	Antenna Gain [dBi]	Tuned RF Output Power [dBm]	Distance [cm]	Power Density [mW/cm²]	FCC Limit [mW/cm²]
2.4G Wi-Fi	2462	16.24	1.00	18.00	20	0.0126	1

Note:

1. *2.4GHz Wi-Fi Output Power: Refer CN2130SX 001

- **Conclusion**

Therefore the maximum calculations result of above are meet the requirement of Radio Frequency Exposure (MPE) limit.