

FCC RF EXPOSURE REPORT

FCC ID: 2BOS5AP9720

Project No. : 2502C254
Equipment : Wireless LAN Access Point
Brand Name : Aicheng
Test Model : AP9720
Series Model : N/A
Applicant : Zhejiang Aicheng Technology Development Co., Ltd.
Address : Room 427, 4th Floor, Building 3, No. 969 Wenyixi West Rd, Wuchang Street, Yuhang District, Hangzhou City, Zhejiang Province, China.
Manufacturer : Zhejiang Aicheng Technology Development Co., Ltd.
Address : Room 427, 4th Floor, Building 3, No. 969 Wenyixi West Road, Wuchang Street, Yuhang District, Hangzhou City, Zhejiang Province, China.
Factory : Joy Technology (ShenZhen) Corporation
Address : HengKeng Ind., Shangpai, Shangwu, Aiqun Rd., Shiyan Town, Shenzhen 518108 China
Date of Receipt : Apr. 02, 2025
Date of Test : Apr. 07, 2025 ~ Jun. 23, 2025
Issued Date : Jul. 09, 2025
Report Version : R00
Test Sample : Engineering Sample No.: DG20250402120
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091 & KDB 447498 D01 v06

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. (Dongguan)

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-5-2502C254	R00	Original Report.	Jul. 09, 2025	Valid

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

where:

S = power density

P = power input to the antenna

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

2. ANTENNA SPECIFICATION

For BLE:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	Angeei	MD246001-01	PIFA	IPEX	4.5

Note: The antenna gain is provided by the manufacturer.

For 2.4GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	Angeei	MD246001-01	PIFA	IPEX	4.1
2	Angeei	MD246001-01	PIFA	IPEX	4.1

Note:

- 1) This EUT supports CDD, and Directional gain = $G_{ANT} + \text{Array Gain}$.
For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=4.1.
- 2) The antenna gain is provided by the manufacturer.

For 5GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	Angeei	MD246001-01	PIFA	IPEX	6.4
2	Angeei	MD246001-01	PIFA	IPEX	7.1
3	Angeei	MD246001-01	PIFA	IPEX	7.3
4	Angeei	MD246001-01	PIFA	IPEX	6.8

Note:

- 1) This EUT supports CDD, and Directional gain = $G_{ANT} + \text{Array Gain}$.
For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=7.30.
- 2) The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

For LE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
4.5	2.8184	5.82	3.8194	0.00214	1	Complies

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
4.1	2.5704	24.09	256.4484	0.13120	1	Complies

For 5GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
7.3	5.3703	26.10	407.3803	0.43546	1	Complies

For the max simultaneous transmission MPE:

Ratio			Total	Limit of Ratio	Test Result
LE	2.4GHz	5GHz			
0.00214	0.13120	0.43546	0.5688	1	Complies

Note:

- (1) The calculated distance is 20 cm.
- (2) Ratio=Power Density (S) (mW/cm²)/Limit of Power Density (S) (mW/cm²)