

FCC RF EXPOSURE REPORT

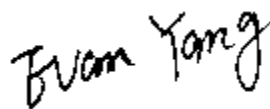
FCC ID: 2APRGM3600

Project No. : 2504C145
Equipment : BE3600 Gigabit Mesh Wi-Fi 7 System
Brand Name : Cudy
Test Model : M3600
Model Name : M3600
Hardware Version : 1.0
Software Version : 2.3.10
Applicant : Shenzhen Cudy Technology Co., Ltd.
Address : 7/F, Lepu Tower (West), 66 Xingke Rd, Nanshan, Shenzhen, China
Manufacturer : Shenzhen Cudy Technology Co., Ltd.
Address : 7/F, Lepu Tower (West), 66 Xingke Rd, Nanshan, Shenzhen, China
Factory : Shenzhen Cudy Technology Co., Ltd.
Address : 7/F, Lepu Tower (West), 66 Xingke Rd, Nanshan, Shenzhen, China
Date of Receipt : Apr. 28, 2025
Date of Test : Apr. 29, 2025 ~ Sep. 02, 2025
Issued Date : Oct. 21, 2025
Test Sample : Engineering Sample No.: DG2025042897
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)

Prepared by

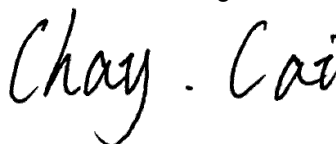
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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-4-2504C145	R00	Original Report.	Oct. 13, 2025	Invalid
BTL-FCCP-4-2504C145	R01	This report has changes as following: 1. Updated the antenna information of 2.4G on page 3. 2. Recalculated the results on page 4. It is a revision of the report BTL-FCCP-4-2504C145 R00. This is a newly released report, replacing the BTL-FCCP-4-2504C145 R00 report.	Oct. 21, 2025	Valid

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

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 2.4GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	 South star	3.N101.1077	Dipole	IPEX	4.25
2	 South star	3.N102.1699	Dipole	IPEX	4.96

Note:

- This EUT supports CDD, and all antenna gains are not equal, Directional gain = $G_{ANT} + \text{Array Gain}$.
For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=4.96.
For power spectral density measurements, $N_{ANT}=2$, $N_{SS} = 1$.
So the Directional gain= $G_{ANT} + \text{Array Gain} = G_{ANT} + 10\log(N_{ANT}/N_{SS})\text{dBi} = 4.96 + 10\log(2/1)\text{dBi} = 7.97$.
Then, the power spectral density limit is $8 - (7.97 - 6) = 6.03$.
- The antenna gain is provided by the manufacturer.

For 5GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	 South star	3.N102.1700	Dipole	IPEX	6.30
2	 South star	3.N102.1701	Dipole	IPEX	6.96

Note:

- This EUT supports CDD, and all antenna gains are not equal, Directional gain = $G_{ANT} + \text{Array Gain}$.
For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=6.96.
For power spectral density measurements, $N_{ANT}=2$, $N_{SS} = 1$.
So the Directional gain= $G_{ANT} + \text{Array Gain} = G_{ANT} + 10\log(N_{ANT}/N_{SS})\text{dBi} = 6.96 + 10\log(2/1)\text{dBi} = 9.97$.
Then, the UNII-1 power spectral density limit is $17 - (9.97 - 6) = 13.03$, the UNII-2A, UNII-2C power spectral density limit is $11 - (9.97 - 6) = 7.03$, the UNII-3 power spectral density limit is $30 - (9.97 - 6) = 26.03$.
- The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

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
4.96	3.1333	24.23	264.8500	0.16518	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
6.96	4.9659	27.66	583.4451	0.57670	1	Complies

For the max simultaneous transmission MPE:

Ratio		Total	Limit of Ratio	Test Result
2.4GHz	5GHz			
0.16518	0.57670	0.74188	1	Complies

Note:

- (1) The calculated distance is 20 cm.
- (2) $\text{Ratio} = \text{Power Density (S) (mW/cm}^2\text{)} / \text{Limit of Power Density (S) (mW/cm}^2\text{)}$

End of Test Report