FCC RF EXPOSURE REPORT

FCC ID: 2AFENXK10T

Project No.	:	2503C105
Equipment	:	Projector
Brand Name	:	XGIMI
Test Model	:	XK10T
Series Model	:	N/A
Applicant	:	XGIMI Technology Co., Ltd.
Address	:	No. 4, Zone A, No. 1129, Shijicheng Road, Chengdu Hi-tech Zone, Sichuan Pilot Free Trade Zone, 610041 China
Manufacturer	:	XGIMI Technology Co., Ltd.
Address	:	No. 4, Zone A, No. 1129, Shijicheng Road, Chengdu Hi-tech Zone, Sichuan Pilot Free Trade Zone, 610041 China
Factory1	:	XGIMI VIETNAM TECHNOLOGY COMPANY LIMITED
Address	:	Lot CN 4-1, My Thuan Industria l Zone,y Thuan Commune,Nam Dinh City,Nam Dinh Province,Vietnam
Factory2	:	Yibin XGIMI Optoelectronic Co., Ltd.
Address	:	No. 2, West Section 4, Changjiang North Road, Lingang Economic Development Zone, Yibin City, Sichuan P.R. China
Date of Receipt	:	Mar. 11, 2025
Date of Test	:	Mar. 13, 2025 ~ Apr. 24, 2025
Issued Date	:	Jun. 25, 2025
Report Version	:	R02
Test Sample	:	Engineering Sample No.: DG20250311146
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-6-2503C105	R00	Original Report.	May 15, 2025	Invalid
BTL-FCCP-6-2503C105	R01	Removed the series model.	May 28, 2025	Invalid
BTL-FCCP-6-2503C105	R02	Added the P/N code of antenna for the BT/LE.	Jun. 25, 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 BT/LE:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	XGIMI	BT-XK10T	PIFA	N/A	0.33

Note: The antenna gain is provided by the manufacturer.

For 2.4GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	XGIMI	409-00236-001	Dipole	I-pex	1.16
2	XGIMI	409-00237-001	Dipole	I-pex	1.68

Note:
1) This EUT supports CDD, and all antenna gains are not equal, Directional gain = G_{ANT}+Array Gain.
For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=1.68.
For power spectral density measurements, N_{ANT}=2, N_{SS} = 1.
So the Directional gain=G_{ANT}+Array Gain=G_{ANT}+10log(N_{ANT}/ N_{SS})dBi=1.68+10log(2/1)dBi=4.69.
2) The antenna gain is provided by the manufacturer.

For 5GHz:

Ant.	Bran□	P/N	Antenna Type	Connector	Gain (dBi)
1	XGIMI	409-00236-001	Dipole	I-pex	8.03
2	XGIMI	409-00237-001	Dipole	I-pex	7.17

Note:
1) This EUT supports CDD, and all antenna gains are not equal, Directional gain = G_{ANT}+Array Gain.
For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=8.03.
So, the UNII-1, UNII-2A and UNII-2C output power limit is 23.98-(8.03-6)=21.95, the UNII-3 output power limit is 30-(8.03-6)=27.97.
For power spectral density measurements, N_{ANT}=2, N_{SS} = 1.
So the Directional gain=G_{ANT}+Array Gain=G_{ANT}+10log(N_{ANT}/ N_{SS})dBi=8.03+10log(2/1)dBi=11.04.
Then, The UNII-1, UNII-2A and UNII-2C power spectral density limit is 11-(11.04-6)=5.96, the UNII-3 power spectral density limit is 30-(11.04-6)=24.96.
2) The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

For BT:

Directional gain (dBi)	Directional 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
0.33	1.0789	9.33	8.5704	0.00184	1	Complies

For LE:

Directional gain (dBi)	Directional 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
0.33	1.0789	9.19	8.2985	0.00178	1	Complies

For 2.4GHz:

Directional gain (dBi)	Directional 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
1.68	1.4723	27.68	586.1382	0.17177	1	Complies

For 5GHz:

Directional gain (dBi)	Directional 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
8.03	6.3533	24.99	315.5005	0.39898	1	Complies

For the max simultaneous transmission MPE:

Ratio			Total	Limit of Ratio	Test Result
BT	2.4GHz	5GHz			
0.00184	0.17177	0.39898	0.57259	1	Complies

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

End of Test Report