

FCC RF EXPOSURE REPORT

FCC ID: 2AZ3IMP2000PRO

Project No. : 2109C030
Equipment : Projector
Brand Name : 

Test Model : MP2000 PRO
Series Model : MP2000
Applicant : GT Technology Chongqing Limited
Address : 3-1, No. 20 Qixin Road Yanjia Street Changshou District Chongqing China
Manufacturer : GT Technology Chongqing Limited
Address : 3-1, No. 20 Qixin Road Yanjia Street Changshou District Chongqing China
Factory : METOO Technology (Shenzhen) Co., LTD
Address : 2/F of Building, ChuangJian phase II Industrial Zone, YingRenShi Community, ShiYan street, BaoAn District, Shenzhen
Date of Receipt : Sep. 03, 2021
Date of Test : Sep. 08, 2021 ~ Nov. 08, 2021
Issued Date : Nov. 30, 2021
Report Version : R00
Test Sample : Engineering Sample No.: DG2021090610-1
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

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



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Approved by : Ethan Ma



TESTING CERT #5123.02

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue	Nov. 30, 2021

1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

2. 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

Table for Filed Antenna:

For BT &LE:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	Shenzhen YiJiaXingSheng Technology CO., Ltd	F8-BT	FPC	N/A	3.41

Note: The antenna gain is provided by the manufacturer.

For 2.4GHz:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	Shenzhen YiJiaXingSheng Technology CO., Ltd	F8-WIFI-A	Copper Tube	N/A	3.92
2	Shenzhen YiJiaXingSheng Technology CO., Ltd	F8-WIFI-B	Copper Tube	N/A	4.08

Note:

- 1) This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain= $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/N]$ dBi, that is Directional gain= $10\log[(10^{3.92/20} + 10^{4.08/20})^2/2]$ dBi =7.01. So, the output power limit is 30-(7.01-6)=28.99, the power spectral density limit is 8-(7.01-6)=6.99.
- 2) The antenna gain is provided by the manufacturer.

For 5GHz:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	Shenzhen YiJiaXingSheng Technology CO., Ltd	F8-WIFI-A	Copper Tube	N/A	3.57
2	Shenzhen YiJiaXingSheng Technology CO., Ltd	F8-WIFI-B	Copper Tube	N/A	3.40

Note:

- 1) This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain= $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/N]$ dBi, that is Directional gain= $10\log[(10^{3.57/20} + 10^{3.40/20})^2/2]$ dBi =6.50. So, the UNII-1 output power limit is 23.98-(6.50-6)=23.48, the UNII-3 output power limit is 30-(6.50-6)=29.50. The UNII-1 power spectral density limit is 11-(6.50-6)=10.50, the UNII-3 power spectral density limit is 30-(6.50-6)=29.50.
- 2) The antenna gain is provided by the manufacturer.

3. TEST RESULTS

Tune up tolerance(dBm)				
BT	LE	2.4GHz	5GHz	
≤ 7.20	≤ 5.50	≤ 27.50	UNII-1	UNII-3
			≤ 20.50	≤ 20.30

For BT:

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
3.41	2.1928	7.20	5.2481	0.00229	1	Complies

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
3.41	2.1928	5.50	3.5481	0.00155	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
7.01	5.0234	27.50	562.3413	0.56228	1	Complies

For 5GHz UNII-1:

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
6.50	4.4668	20.50	112.2018	0.09976	1	Complies

For 5GHz UNII-3:

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
6.50	4.4668	20.30	107.1519	0.09527	1	Complies

For the max simultaneous transmission MPE:

Power Density (S) (mW/cm ²)	Power Density (S) (mW/cm ²)	Total	Limit of Power Density (S) (mW/cm ²)	Test Result
BT	2.4GHz			
0.00229	0.56228	0.56457	1	Complies

Note: The calculated distance is 20 cm.
Output power including tune up tolerance.

End of Test Report