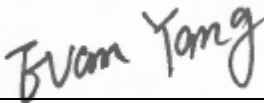



FCC RF EXPOSURE REPORT

FCC ID: 2AIMRRD23

Project No. : 2311C059
Equipment : Xiaomi Router AX3000T
Brand Name : Xiaomi
Test Model : RD23
Series Model : N/A
Applicant : Beijing Xiaomi Electronics Co., Ltd.
Address : #802, 8th Floor, Building 5, No. 15 10th Kechuang Street, Beijing
Economic-Technological Development Area, Beijing, China, 100176
Manufacturer : Beijing Xiaomi Electronics Co., Ltd.
Address : #802, 8th Floor, Building 5, No. 15 10th Kechuang Street, Beijing
Economic-Technological Development Area, Beijing, China, 100176
Factory : Shenzhen MTC Digital Technology Co., Ltd
Address : 2F Building 3,6F,2F, Building 2, MTC Industry Park, Xialilang
community, Nanwan street, Longgang district, Shenzhen, China
Date of Receipt : Dec. 05, 2023
Date of Test : Dec. 06, 2023 ~ Feb. 27, 2024
Issued Date : Mar. 29, 2024
Report Version : R00
Test Sample : Engineering Sample No.: DG2023120582
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091

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

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-4-2311C059	R00	Original Report.	Mar. 29, 2024	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 2.4GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	 South star	3.N102.1050	Dipole	N/A	5.02
2	 South star	3.N102.1053	Dipole	N/A	5.24

Note:

This EUT supports SISO / 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=5.24.

For 5GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	 South star	3.N102.1053	Dipole	N/A	5.19
2	 South star	3.N102.1052	Dipole	N/A	6.41
3	 South star	3.N102.1051	Dipole	N/A	5.93

Note:

This EUT supports SISO / 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=6.41.

3. ANTENNA SPECIFICATION

For 2.4GHz:

Operating Mode	TX Mode	
	1TX	2TX
IEEE 802.11b	V (Ant. 1)	-
IEEE 802.11g	V (Ant. 1)	-
IEEE 802.11n(HT20)	-	V(Ant. 1 + Ant. 2)
IEEE 802.11n(HT40)	-	V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE20)	-	V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE40)	-	V(Ant. 1 + Ant. 2)

For 5GHz:

Operating Mode	TX Mode	1TX	2TX
IEEE 802.11a		V (Ant. 1)	-
IEEE 802.11n(HT20)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11n(HT40)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11ac(VHT20)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11ac(VHT40)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11ac(VHT80)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11ac(VHT160)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11ax(HE20)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11ax(HE40)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11ax(HE80)		-	V (Ant. 1 + Ant. 2 + Ant. 3)
IEEE 802.11ax(HE160)		-	V (Ant. 1 + Ant. 2 + Ant. 3)

4. CALCULATED RESULT

For 2.4GHz:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Average Output Power (dBm)	Max. Average Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.24	3.3420	24.25	266.0725	0.17699	1	Complies

For 5GHz:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Average Output Power (dBm)	Max. Average Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
6.41	4.3752	28.3	676.0830	0.58878	1	Complies

For the max simultaneous transmission MPE:

Ratio		Total	Limit of Ratio	Test Result
2.4GHz	5GHz			
0.17699	0.58878	0.76577	1	Complies

Note: The calculated distance is 20 cm.

End of Test Report