

FCC RF EXPOSURE REPORT

FCC ID: 2AFZZR4CM

Project No. : 2102C271 Equipment : Mi Router 4C

Brand Name : MI
Test Model : R4CM
Series Model : N/A

Applicant: Xiaomi Communications Co.,Ltd

Address : #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District,

Beijing, China

Manufacturer : Xiaomi Communications Co.,Ltd

Address : #019, 9th Floor, Building 6, 33 Xi'ergi Middle Road, Haidian District,

Beijing, China

Factory : Huizhou MTN WEIYE Technology Development Co.,Ltd
Address : No.2 Huitai Road,Huinan High-tech Industrial Park,Huiao
Avenue,Huizhou City,Guangdong Province,China. 516000

Date of Receipt : Feb. 25, 2021

Date of Test : Mar. 05, 2021 ~ Mar. 30, 2021

Issued Date : Apr. 08, 2021

Report Version : R00

Test Sample : Engineering Sample No.: DG2021022230

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

INC. MRA

ACCREDITED

Certificate #5123.02

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date	
R00	Original Issue	Apr. 08, 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 Road, Shixia, Dalang Town, Dongguan, Guangdong, 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:

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

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

Table for Filed Antenna:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
1	Cortec	M47	Dipole	N/A	5	
2	Cortec	M47	Dipole	N/A	5	
1	South star	M47	Dipole	N/A	5	
2	South star	M47	Dipole	N/A	5	
1	Innowave	M47	Dipole	N/A	5	
2	Innowave	M47	Dipole	N/A	5	

Note:

1) This EUT supports CDD, and all antennas have the same gain, Directional gain = G_{ANT} +Array Gain. For power measurements, Array Gain=0dB ($N_{ANT} \le 4$), so the Directional gain=5.

For power spectral density measurements, N_{ANT} =4, N_{SS} = 1.

So the Directional gain=G_{ANT}+Array Gain=G_{ANT}+10log(N_{ANT}/ N_{SS})dBi=5+10log(2/1)dBi=8.01.

Then, the power spectral density limit is 8-(8.01-6)=5.99.

2) The antenna gain is provided by the manufacturer.

Table for Antenna Configuration:

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)



3. TEST RESULTS

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/cm²)	Test Result
5	3.1623	29.13	818.4648	0.51517	1	Complies

Note: The calculated distance is 20 cm.

End of Test Report