RF EXPOSURE
Test Report

Report No.: MTi220330015-01E3

Date of issue: 2022-08-08

Applicant: Shenzhen Jiayitong Electronics Co., Ltd.

Product name: 1001.7168.9001.8003.9003

Model(s): 1001

FCC ID: 2A6H4-NEDY2G

Shenzhen Microtest Co., Ltd.

http://www.mtitest.com

Address: 101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China.
Tel: (86-755)88850135 Fax: (86-755) 88850136 Web: www.mtitest.com E-mail: mti@51mti.com

Instructions

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2. The test results of this report are only responsible for the samples submitted;
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5. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

TEST RESULT CERTIFICATION

Applicant's name.....	**Shenzhen Jiayitong Electronics Co., Ltd.**
Address.....	5th Floor, Building A1, Huafeng Century Science and Technology Park, Intersection of Baoyuan Road and Hangcheng Avenue, Xixiang Street, Bao'an District, Shenzhen City, Guangdong Province
Manufacturer's Name.....	**Shenzhen Jiayitong Electronics Co., Ltd.**
Address.....	5th Floor, Building A1, Huafeng Century Science and Technology Park, Intersection of Baoyuan Road and Hangcheng Avenue, Xixiang Street, Bao'an District, Shenzhen City, Guangdong Province
Factory's Name.....	**Shenzhen Jiayitong Electronics Co., Ltd.**
Address.....	5th Floor, Building A1, Huafeng Century Science and Technology Park, Intersection of Baoyuan Road and Hangcheng Avenue, Xixiang Street, Bao'an District, Shenzhen City, Guangdong Province
Product description	
Product name.....	1001.7168.9001.8003.9003
Trademark	JMANCE
Model Name	1001
Serial Model.....	N/A
Standards	N/A
Test procedure.....	KDB 447498 D01 v06
Date of Test	
Date (s) of performance of tests .....:	2022-04-20 ~ 2022-08-08
Test Result .....:	Pass
This device described above has been tested by Shenzhen Microtest Co., Ltd. and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.	

Testing Engineer : Yanice Xie

(Yanice Xie)

Technical Manager : Leon Chen

(Leon Chen)

Authorized Signatory : Tom Xue

(Tom Xue)

RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	$*900/f^2$	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	$*180/f^2$	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

Friis transmission formula: $Pd= (Pout*G)\ (4*pi*R^2)$

Where

Pd= Power density in mW/cm2

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1415926

R= distance between observation point and center of the radiator in cm(20cm)

Pd the limit of MPE, 1mW/cm2. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Measurement Result

BT:

Operation Frequency: 2402-2480MHz,

Power density limited: 1mW/ cm^2

Antenna Type: PCB Antenna;
WIFI antenna gain: 0dBi

2.4GWiFi:

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz,

Power density limited: 1mW/ cm^2

Antenna Type: External Antenna;
WIFI antenna gain: 0dBi

R=20cm

mW=10^(dBm/10)

antenna gain Numeric=10^(dBi/10)= 10^(3/10)=2

BR+EDR:

Channel Freq. (MHz)	modulation	conducted power (dBm)	Tune-up power (dBm)	Max tune-up power		Antenna Gain		Evaluation result (mW/cm^2)	Power density Limits (mW/cm^2)
				(dBm)	(mW)	(dBi)	Numeric		
2402	GFSK	4.12	5±1	6	3.981	0	1.00	0.0008	1
2441		4.12	5±1	6	3.981	0	1.00	0.0008	1
2480		5.02	5±1	6	3.981	0	1.00	0.0008	1
2402	π/4-DQPSK	4.24	5±1	6	3.981	0	1.00	0.0008	1
2441		4.19	5±1	6	3.981	0	1.00	0.0008	1
2480		5.08	5±1	6	3.981	0	1.00	0.0008	1
2402	8DPSK	4.16	5±1	6	3.981	0	1.00	0.0008	1
2441		4.18	5±1	6	3.981	0	1.00	0.0008	1
2480		5.09	5±1	6	3.981	0	1.00	0.0008	1

2.4GWiFi:

Channel Freq. (MHz)	modulation	conducted power	Tune-up power	Max		Antenna	Evaluation result at 20cm	Power density Limits
		(dBm)	(dBm)	tune-up power		Gain	Power density(mW/cm^2)	(mW/cm^2)
				(dBm)	(mW)	Numeric		
		Ant A	Ant A	Ant A	Ant A	Ant A	Ant A	
2412	802.11b	11.81	11±1	12	15.848932	1	0.00315	1
2437		11.14	11±1	12	15.848932	1	0.00315	1
2462		11.58	11±1	12	15.848932	1	0.00315	1
2412	802.11g	10.82	11±1	12	15.848932	1	0.00315	1
2437		10.36	11±1	12	15.848932	1	0.00315	1
2462		10.89	11±1	12	15.848932	1	0.00315	1
2412	802.11n H20	10.25	11±1	12	15.848932	1	0.00315	1
2437		10.17	11±1	12	15.848932	1	0.00315	1
2462		10.39	11±1	12	15.848932	1	0.00315	1

Simultaneous transmit

BT +2.4GWiFi= 0.0008+0.00315=0.00323

Conclusion:

For the max result: 0.00323≤ 1.0 for 1g SAR, No SAR is required.

----END OF REPORT----