

Product Name: Wireless Access Point	Report No: FCC022022-05744RF14
Product Model: AP 6WA	Security Classification: Open
Version: V1.0	Total Page:6

TIRT Testing Report



Prepared By:	Checked By:	Approved By:	A circular blue stamp with the text "TIRT Technology Service Co., Ltd." around the perimeter, "TIRT" in the center, and "Shenzhen" below it.
Stone Tang	Randy Lv	Daniel Chen	
Stone Tang	Randy Lv	Daniel Chen	

FCC RF EXPOSURE REPORT

FCC ID: 2A3WK-AP6WAR1

Equipment : Wireless Access Point
Brand Name : 
Test Model : AP 6WA
Series Model : N/A
Applicant : Nomadix, Inc.
Address : 21600 Oxnard Street - 19th floor, Woodland Hills, California, United States
Manufacturer : Nomadix, Inc.
Address : 21600 Oxnard Street - 19th floor, Woodland Hills, California, United States
Date of Receipt : 2022.07.24
Date of Test : 2022.07.24-2022.10.31
Issued Date : 2022.11.03
Report Version : V1.0
Test Sample : Engineering Sample No.: 20221103019324
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091

- The test result referred exclusively to the presented test model /sample.
- Without written approval of TIRT Inc. the test report shall not reproduced except in full.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
FCC022022-05744RF14	V1.0	Original Report.	2022.11.03	Valid

1. TEST FACILITY

Company:	Beijing TIRT Technology Service Co.,Ltd Shenzhen
Address:	101, 3 # Factory Building, Gongjin Electronics, Shatin Community, Kengzi Street, Pingshan District, Shenzhen City, China
CNAS Registration Number:	CNAS L14158
A2LA Registration Number	6049.01
Telephone:	+86-0755-27087573

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:

For 2.4G WIFI

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Integral	N/A	3.33
2	N/A	N/A	Integral	N/A	2.64

For BLE

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Integral	N/A	2

For 5G WIFI

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	1.91
2	N/A	N/A	PCB	N/A	1.91

Note: The antenna gain is provided by the manufacturer.

Table for Antenna Configuration:

2.4G WIFI	
Operating Mode TX Mode	2TX
IEEE 802.11b	V (Ant. 1 + Ant. 2)
IEEE 802.11g	V (Ant. 1 + Ant. 2)
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)

5G WIFI	
Operating Mode TX Mode	2TX
IEEE 802.11a	V (Ant. 1 + Ant. 2)
IEEE 802.11n(HT20)	V (Ant. 1 + Ant. 2)
IEEE 802.11n(HT40)	V (Ant. 1 + Ant. 2)
IEEE 802.11ac(VHT20)	V (Ant. 1 + Ant. 2)
IEEE 802.11ac(VHT40)	V (Ant. 1 + Ant. 2)
IEEE 802.11ac(VHT80)	V (Ant. 1 + Ant. 2)
IEEE 802.11ax(HE20)	V (Ant. 1 + Ant. 2)
IEEE 802.11ax(HE40)	V (Ant. 1 + Ant. 2)
IEEE 802.11ax(HE80)	V (Ant. 1 + Ant. 2)

3. TEST RESULTS

For worst case:

BLE

Directional Gain (dBi)	Directional Gain (numeric)	Max. Turn-up Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2	1.58	9.31	8.53	0.0027	1	Complies

2.4G WIFI

Directional Gain (dBi)	Directional Gain (numeric)	Max. Turn-up Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.33	2.15	22.96	197.70	0.0847	1	Complies

5G WIFI

Directional Gain (dBi)	Directional Gain (numeric)	Max. Turn-up Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1.91	1.55	26.78	476.43	0.1471	1	Complies

For the simultaneous transmission MPE:

Ratio			Total	Limit of Ratio	Test Result
BLE	2.4G WIFI	5G WIFI			
0.0027	0.0847	0.1471	0.2345	1	Complies

Note: The calculated distance is 20 cm.

End of Test Report