FCC RF EXPOSURE REPORT

FCC ID: X4YNBL12PAC

Project No.	:	2103C091
Equipment	:	Dual-Band AC1200 Wireless Router
Brand Name	:	NEXXT
Test Model	:	NCR-N1200
Series Model	:	N/A
Applicant	:	NEXXT SOLUTIONS
Address	:	3505 N.W 107TH AVE. MIAMI, FL 33178
Manufacturer	:	NEXXT SOLUTIONS
Address	:	3505 N.W 107TH AVE. MIAMI, FL 33178
Date of Receipt	:	Mar. 09, 2021
Date of Test	:	Mar. 10, 2021 ~ Apr. 16, 2021
Issued Date	:	Apr. 27, 2021
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG2021030896
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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Certificate #5123.02

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue	Apr. 27, 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:
For 2.4GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Tenda	N/A	Dipole	N/A	5.09
2	Tenda	N/A	Dipole	N/A	5.09

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}≤4), so the Directional gain=5.09.
For power spectral density measurements, N_{ANT}=2, N_{SS} = 1.
So the Directional gain=G_{ANT}+Array Gain=G_{ANT}+10log(N_{ANT}/ N_{SS})dBi=5.09+10log(2/1)dBi=8.10.
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)

For 5GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Tenda	N/A	Dipole	N/A	5.90
2	Tenda	N/A	Dipole	N/A	5.90

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}≤4), so the Directional gain=5.90.
For power spectral density measurements, N_{ANT}=2, N_{SS} = 1.
So the Directional gain=G_{ANT}+Array Gain=G_{ANT}+10log(N_{ANT}/ N_{SS})dBi=5.90+10log(2/1)dBi=8.91.
2) The antenna gain is provided by the manufacturer.

Table for Antenna Configuration:

Operating Mode / TX Mode	1TX	2TX
IEEE 802.11a	V (Ant. 1)	-
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)

3. TEST RESULTS

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
8.10	6.4565	24.86	306.1963	0.39351	1	Complies

For 5GHz:

Antenna Gain (dBi)	Antenna 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
8.91	7.7804	20.50	112.2018	0.17376	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
2.4GHz	5GHz			
0.39351	0.17376	0.56727	1	Complies

Note: The calculated distance is 20 cm.

End of Test Report