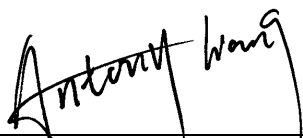


FCC RF EXPOSURE REPORT

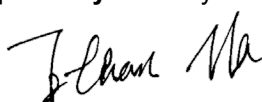
FCC ID: 2AWWI-ISKTG84

Project No. : 2107C140
Equipment : GPON Home Gateway
Brand Name : N/A
Test Model : INNBOXG84
Series Model : N/A
Applicant : ISKRATEL,D.O.O., Kranj
Address : Ljubljanska cesta 24a, Kranj 4000, Slovenia
Manufacturer : ISKRATEL,D.O.O., Kranj
Address : Ljubljanska cesta 24a, Kranj 4000, Slovenia
Date of Receipt : Jul. 21, 2021
Date of Test : Aug. 02, 2021 ~ Sep. 02, 2021
Issued Date : Sep. 23, 2021
Report Version : R00
Test Sample : Engineering Sample No.: DG20210730110
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.



Prepared by : Antony Liang



Approved by : Ethan Ma



TESTING CERT #5123.02

Add: No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China

Tel: +86-769-8318-3000

Web: www.newbtl.com

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue	Sep. 23, 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 Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of 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:

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

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

Antenna Specification:

For 2.4GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	RFlink	RF11C03055S	PCB	N/A	2.61
2	RFlink	RF11C03056S	PCB	N/A	3.41

Note:

- This EUT supports CDD, and all antenna gains are not equal, Directional gain=10log[(10^{G1/20}+10^{G2/20}+...10^{GN/20})²/N]dBi, that is Directional gain=10log[(10^{2.61/20}+10^{3.41/20})²/2]dBi=6.03. So, the output power limit is 30-(6.03-6)=29.97, the power spectral density limit is 8-(6.03-6)=7.97.
- The antenna gain is provided by the manufacturer.

For 5GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	RFlink	RF11C03055S	PCB	N/A	3.26
2	RFlink	RF11C03056S	PCB	N/A	3.55
3	RFlink	RF11C03057S	PCB	N/A	2.92
4	RFlink	RF11C03058S	PCB	N/A	2.86

Note:

- This EUT supports CDD, and all antenna gains are not equal, Directional gain=10log[(10^{G1/20}+10^{G2/20}+...10^{GN/20})²/N]dBi, that is Directional gain=10log[(10^{3.26/20}+10^{3.55/20}+10^{2.92/20}+10^{2.86/20})²/4]dBi=9.17. So, the UNII-1, UNII-3 output power limit is 30-(9.17-6)=26.83, the UNII-2A, UNII-2C output power limit is 23.98-(9.17-6)=20.81. The UNII-1 power spectral density limit is 17-(9.17-6)=13.83, the UNII-2A, UNII-2C power spectral density limit is 11-(9.17-6)=7.83, the UNII-3 power spectral density limit is 30-(9.17-6)=26.83.
- The antenna gain is provided by the manufacturer.

Table for Antenna Configuration:
For 2.4GHz:

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)

For 5GHz:

Operating Mode	TX Mode	4TX
IEEE 802.11a		V(Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11n(HT20)		V(Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11n(HT40)		V(Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11ac(VHT20)		V(Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11ac(VHT40)		V(Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11ac(VHT80)		V(Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)

3. TEST RESULTS

For 2.4GHz:

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/cm ²)	Test Result
6.03	4.0087	24.42	276.6942	0.22078	1	Complies

For 5GHz:

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/cm ²)	Test Result
9.17	8.2604	26.60	457.0882	0.75154	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			
0.22078	0.75154	0.97232	1	Complies

Note: The calculated distance is 20 cm.

End of Test Report