	BUREAU VERITAS
	RF Exposure Report
Report No.:	SA190910E04
FCC ID:	2AUYB-TXXX
Test Model:	TLP3-71300-5120-24-T
Received Date:	Sep. 10, 2019
Test Date:	Sep. 23, 2019
Issued Date:	Oct. 17, 2019
Applicant:	Leonton Technologies Co., Ltd.
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Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
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FCC Registration / Designation Number:	723255 / TW2022
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	Release Control Record	
Issue No.	Description	Date Issued
SA190910E04	Original release.	Oct. 17, 2019



#### **Certificate of Conformity** 1

Product:	Wifi module
Brand:	Leonton
Test Model:	TLP3-71300-5120-24-T
Sample Status:	MASS-PRODUCTION
Applicant:	Leonton Technologies Co., Ltd.
Test Date:	Sep. 23, 2019
Standards:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01 General RF Exposure Guidance v06
	IEEE C95.3-2002

The above equipment has been tested by Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Mandly Mu, Date: Oct. 17, 2019 Wendy Wu/Specialist

Approved by :

Date: Oct. 17, 2019

Clark Lin / Technical Manager



# 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)			Average Time (minutes)
	Limits For Gener	al Population / Uncor	trolled Exposure	
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f²)*	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

f = Frequency in MHz ; \*Plane-wave equivalent power density

#### 2.2 MPE Calculation Formula

### $Pd = (Pout^{*}G) / (4^{*}pi^{*}r^{2})$

#### where

 $Pd = power density in mW/cm^2$ 

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

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

# 2.3 Classification

The antenna of this product, under normal use condition, is at least 20 cm away from the body of the user. So, this device is classified as **Mobile Device**.

# 2.4 Antenna Gain

Ant. No.	Chain No.	Antenna Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type
1	1 Chain 0	3	2.4~2.4835	Dipole	R-SMA
	5	5.15~5.85	Dipole	R-SIVIA	
2 Chain 1	3	2.4~2.4835	Dipole	R-SMA	
	5	5.15~5.85	Dipole		



### 2.5 Calculation Result of Maximum Conducted Power

Operation Mode	Evaluation Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WLAN (2.4GHz)	2437	725.429	6.01	20	0.57587	1
WLAN (U-NII-1)	5230	101.224	8.01	20	0.12735	1
WLAN (U-NII-3)	5755	121.016	8.01	20	0.15226	1

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

- 2. 2.4GHz: The directional gain = 3dBi + 10log(2) = 6.01dBi
- 3. 5GHz: The directional gain = 5dBi + 10log(2) = 8.01dBi
- 4. 2.4GHz & 5GHz technology can't transmit at same time.

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