	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.
Address:	9F-1., No. 43, Fuxing Rd., Xindian Dist., New Taipei City 231, Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022
1	

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specification, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification. The report must not be used by the client to claim product certification, approval, or endorsement by any government agencies.



Table of Contents

1 Certificate of Conformity	
 2.1 Limits for Maximum Permissible Exposure (MPE) 2.2 MPE Calculation Formula 	5
2.2 MPE Calculation Formula	-
2.4 Antenna Gain	5 5



	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 ²)	Limit (mW/cm ²)
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.

---- END ----