

## RF Exposure Report

**Report No.:** SA190319E02

**FCC ID:** NKR-LVSK-IDU

**Test Model:** LVSKIDU

**Received Date:** Mar. 19, 2019

**Test Date:** May 19, 2019

**Issued Date:** June 12, 2019

**Applicant:** Wistron NeWeb Corp.

**Address:** 20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan, R.O.C.

**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 R.O.C.

**Test Location:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan R.O.C.

**FCC Registration /  
Designation Number:** 723255 / TW2022

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### Release Control Record

Issue No.	Description	Date Issued
SA190319E02	Original release.	June 12, 2019

## 1 Certificate of Conformity

**Product:** LVSKIDU

**Brand:** WNC

**Test Model:** LVSKIDU

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** Wistron NeWeb Corp.

**Test Date:** May 19, 2019

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

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 :** Phoenix Huang , **Date:** June 12, 2019  
Phoenix Huang / Specialist

**Approved by :** May Chen , **Date:** June 12, 2019  
May Chen / Manager

## 2 RF Exposure

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

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	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<sup>2</sup>

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

Frequency (MHz)	5745		5785		5825		Antenna Type	Antenna Connector
	Directional Antenna Gain (dBi)							
Vertical-Pol	<b>XZ</b>	<b>4.69</b>	<b>XZ</b>	<b>4.84</b>	<b>XZ</b>	<b>4.79</b>	PCB	i-pex(MHF)
	YZ	2.93	YZ	2.60	YZ	2.49		
	XY	4.12	XY	4.08	XY	4.20		
Horizontal-pol	XZ	4.41	XZ	4.67	XZ	4.36	PCB	i-pex(MHF)
	YZ	1.24	YZ	1.43	YZ	1.51		
	<b>XY</b>	<b>4.94</b>	XY	<b>5.09</b>	XY	<b>4.73</b>		

Note: More detailed information, please refer to operating description.

## 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	5795	992.471	5.09	20	0.63745	1

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The directional gain = 5.09dBi
3. The Max. Power = Max. tune up power including tolerance declared by client.

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