

## RF Exposure Report

**Report No.:** SA180504E08

**FCC ID:** NKR-IMG2

**Test Model:** IMG2

**Received Date:** May 16, 2018

**Test Date:** Aug. 05 ~ Aug. 06, 2018

**Issued Date:** Aug. 10, 2018

**Applicant:** Wistron NeWeb Corporation

**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

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

**FCC Registration /** 788550 / TW0003

**Designation Number:**



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### Release Control Record

Issue No.	Description	Date Issued
SA180504E08	Original release.	Aug. 10, 2018

## 1 Certificate of Conformity

**Product:** IMG2 LTE module

**Brand:** Wistron Neweb Corporation

**Test Model:** IMG2

**Sample Status:** Engineering sample

**Applicant:** Wistron NeWeb Corporation

**Test Date:** Aug. 05 ~ Aug. 06, 2018

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

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1

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 RF characteristics under the conditions specified in this report.

**Prepared by :** Pettie Chen , **Date:** Aug. 10, 2018  
Pettie Chen / Senior Specialist

**Approved by :** Bruce Chen , **Date:** Aug. 10, 2018  
Bruce Chen / Project Engineer

## 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

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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 20cm away from the body of the user. So, this device is classified as Mobile Device.

### 2.4 Antenna Gain

Function	Frequency Band (MHz)	Antenna Gain (dBi)
LTE B2	1850.7~1909.3	1.56
LTE B4	1710.7~1754.3	1.62
LTE B5	824.7~848.3	3.2
LTE B13	779.5~784.5	1.66

### 3 Calculation Result of Maximum Conducted Power

Function	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
LTE B2	1850.7~1909.3	24.32	1.56	20	0.077	1
LTE B4	1710.7~1754.3	24.55	1.62	20	0.082	1
LTE B5	824.7~848.3	24.35	3.2	20	0.113	0.55
LTE B13	779.5~784.5	25.35	1.66	20	0.100	0.52

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