

## 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                        |

---END---