

## FCC RF Exposure Report

**Report No.:** SA200306C24

**FCC ID:** 2AARNWLTPH-8M

**Test Model:** WLTPH-8M

**Received Date:** Mar. 06, 2020

**Test Date:** Mar. 18 ~ Apr. 16, 2020

**Issued Date:** Apr. 21, 2020

**Applicant:** PHIHONG TECHNOLOGY CO., LTD.

**Address:** No. 568, Fuxing 3rd Rd., Guishan Dist., Taoyuan City, 333 Taiwan

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

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

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
33383, Taiwan

**FCC Registration /** 788550 / **TW0003**  
**Designation Number:**



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### Release Control Record

| Issue No.   | Description      | Date Issued   |
|-------------|------------------|---------------|
| SA200306C24 | Original release | Apr. 21, 2020 |

## 1 Certificate of Conformity

**Product:** LTE Module

**Brand:** PHIHONG

**Test Model:** WLTPH-8M

**Sample Status:** Engineering Sample

**Applicant:** PHIHONG TECHNOLOGY CO., LTD.

**Test Date:** Mar. 18 ~ Apr. 16, 2020

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

**References Test Guidance:** 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 RF characteristics under the conditions specified in this report.

**Prepared by :** Pettie Chen, **Date:** Apr. 21, 2020

Pettie Chen / Senior Specialist

**Approved by :** Bruce Chen, **Date:** Apr. 21, 2020

Bruce Chen / Senior 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

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

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 20cm away from the body of the user.

So, this device is classified as **Mobile Device**.

### 3 Calculation Result of Maximum Density Power

| Function     | Frequency Band (MHz) | EIRP (dBm) | Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|--------------|----------------------|------------|---------------|-------------------------------------|-----------------------------|
| WCDMA Band 2 | 1850.7-1909.3        | 25.12      | 20            | 0.065                               | 1                           |
| WCDMA Band 4 | 1712.4-1752.6        | 24.82      | 20            | 0.060                               | 1                           |
| LTE Band 2   | 1850.7-1909.3        | 24.99      | 20            | 0.063                               | 1                           |
| LTE Band 4   | 1710.7-1754.3        | 25.35      | 20            | 0.068                               | 1                           |
| LTE Band 66  | 1710.7-1779.3        | 25.20      | 20            | 0.066                               | 1                           |

| Function     | Frequency Band (MHz) | ERP (dBm) | EIRP (dBm) | Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|--------------|----------------------|-----------|------------|---------------|-------------------------------------|-----------------------------|
| WCDMA Band 5 | 826.4-846.6          | 23.32     | 25.47      | 20            | 0.070                               | 0.551                       |
| LTE Band 5   | 824.7-848.3          | 23.52     | 25.67      | 20            | 0.073                               | 0.550                       |
| LTE Band 12  | 699.7-715.3          | 23.58     | 25.73      | 20            | 0.074                               | 0.466                       |
| LTE Band 13  | 779.5-784.5          | 23.90     | 26.05      | 20            | 0.080                               | 0.520                       |
| LTE Band 14  | 790.5-795.5          | 23.30     | 25.45      | 20            | 0.070                               | 0.527                       |
| LTE Band 71  | 665.5-695.5          | 23.44     | 25.59      | 20            | 0.072                               | 0.444                       |

EIRP = ERP + 2.15dB

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

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