

Test Report No.:  
**FCC2021-0027-EMF**

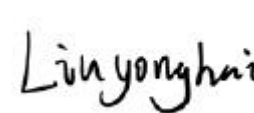
## **EMC Test Report**

**EUT** : PIR & Light Sensor  
**MODEL** : WS202-915M  
**BRAND NAME** : Milesight  
**APPLICANT** : Xiamen Milesight IoT Co., Ltd.  
**Classification Of Test** : N/A

**CVC Testing Technology Co., Ltd.**



# CVC Testing Technology Co., Ltd.

|                                                                                                                                   |                                                                                                                                      |                                                                                                                                        |                       |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Test Report No.: FCC2021-0027-EMF                                                                                                 |                                                                                                                                      | Page 2 of 7                                                                                                                            |                       |
| <b>Applicant</b>                                                                                                                  |                                                                                                                                      | Name : Xiamen Milesight IoT Co., Ltd.<br>Address : 4/F,NO. 63-2 Wanghai Road, 2nd Software Park,Xiamen ,China                          |                       |
| <b>Manufacturer</b>                                                                                                               |                                                                                                                                      | Name : Xiamen Milesight IoT Co., Ltd.<br>Address : 4/F,NO. 63-2 Wanghai Road, 2nd Software Park,Xiamen ,China                          |                       |
| <b>Equipment Under Test</b>                                                                                                       |                                                                                                                                      | Name : PIR & Light Sensor<br>Model/Type: WS202-915M<br>Trade mark : Milesight<br>SerialNO.:N/A<br>Sampe NO.:6-1                        |                       |
| Date of Receipt.                                                                                                                  | 2021.09.8                                                                                                                            | Date of Testing                                                                                                                        | 2021.09.08~2021.11.08 |
| <b>Test Specification</b>                                                                                                         |                                                                                                                                      | <b>Test Result</b>                                                                                                                     |                       |
| FCC Part 2 (Section 2.1091)<br>KDB 447498 D01<br>IEEE C95.1                                                                       |                                                                                                                                      | PASS                                                                                                                                   |                       |
| <b>Evaluation of Test Result</b>                                                                                                  |                                                                                                                                      | The equipment under test was found to comply with the requirements of the standards applied.<br>Issue Date: 2021.11.08                 |                       |
| Tested by:<br><br>Xu ZhenFei<br>Name Signature | Reviewed by:<br><br>Liu YongHai<br>Name Signature | Approved by:<br><br>Chen HuaWen<br>Name Signature |                       |
| <b>Other Aspects: NONE.</b>                                                                                                       |                                                                                                                                      |                                                                                                                                        |                       |
| Abbreviations:OK, Pass= passed      Fail = failed      N/A= not applicable      EUT= equipment, sample(s) under tested            |                                                                                                                                      |                                                                                                                                        |                       |
| This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.            |                                                                                                                                      |                                                                                                                                        |                       |



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**RELEASE CONTROL RECORD**

| ISSUE NO.        | REASON FOR CHANGE | DATE ISSUED |
|------------------|-------------------|-------------|
| FCC2021-0027-EMF | Original release  | 2021.11.08  |



## 1. GERTIFICATION

|                  |                                |
|------------------|--------------------------------|
| FCC ID           | 2AYHY-WS202                    |
| PRODUCT          | PIR & Light Sensor             |
| BRAND            | Milesight                      |
| MODEL            | WS202-915M                     |
| ADDITIONAL MODEL | N/A                            |
| APPLICANT        | Xiamen Milesight IoT Co., Ltd. |
| STANDARDS        | FCC Part 2 (Section 2.1091)    |
|                  | KDB 447498 D01                 |
|                  | IEEE C95.1                     |

For trading purposes, the product is available in three different exterior colors

## 2. RF EXPOSURE LIMIT

### 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 |                               |                               |                                     |                        |
| 300-1500                                              | ...                           | ...                           | F/1500                              | 30                     |
| 1500-100,000                                          | ...                           | ...                           | 1.0                                 | 30                     |

F = Frequency in MHz

## 3. 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

## 4. 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**.



## 5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

| Transmitter Circuit | Peak Gain (dBi) | Antenna Type   |
|---------------------|-----------------|----------------|
| Chain 0             | 1               | Spring Antenna |

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The tuned conducted Average Power (declared by client)

| Mode | Frequency (MHz) | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|------|-----------------|--------------------|-----------------|-----------------------|-----------------------|
| DR0  | 902.3-914.9     | 8                  | +1              | 7                     | 9                     |
| DR8  | 903.0-914.2     | 8                  | +1              | 7                     | 9                     |

The measured conducted Average Power(worse case)

| Mode | Frequency (MHz) | Averaged Power (dBm) |
|------|-----------------|----------------------|
| DR0  | 914.9           | 7.33                 |
| DR8  | 914.2           | 7.33                 |

| FREQUENCY BAND (MHz) | MAX AVERAGE POWER (dBm) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/cm <sup>2</sup> ) | LIMIT (mW/cm <sup>2</sup> ) |
|----------------------|-------------------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 902.3-914.9          | 9                       | 1                  | 20            | 0.001989                            | 0.602                       |
| 903.0-914.2          | 9                       | 1                  | 20            | 0.001989                            | 0.602                       |



## Important

- (1) The test report is valid with the official seal of the laboratory and the signatures of Test engineer, Author and Reviewer simultaneously.
- (2) The test report is invalid if altered.
- (3) Any photocopies or part photocopies in the test report are forbidden without the written permission from the laboratory.
- (4) Objections to the test report must be submitted to the laboratory within 15 days.
- (5) Generally, commission test is responsible for the tested samples only.
- (6) Any photocopies or part photocopies of the test report are forbidden without the written permission from CVC;

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