ACCREDITED
CERTIFICATE #5473.01

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** |

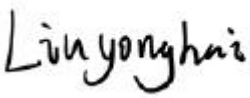
## CVC Testing Technology Co., Ltd.

| | |
|---|---|
| **Applicant** | **Name : Xiamen Milesight IoT Co., Ltd.**<br>**Address : 4/F,NO. 63-2 Wanghai Road, 2nd Software Park,Xiamen ,China** |
| **Manufacturer** | **Name : Xiamen Milesight IoT Co., Ltd.**<br>**Address : 4/F,NO. 63-2 Wanghai Road, 2nd Software Park,Xiamen ,China** |
| **Equipment Under Test** | **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** |

| **Test Specification** | **Test Result** |
|---|---|
| **FCC Part 2 (Section 2.1091)**<br>**KDB 447498 D01**<br>**IEEE C95.1** | PASS |

| | |
|---|---|
| **Evaluation of Test Result** | The equipment under test was found to comply with the requirements of the standards applied.<br>**Issue Date: 2021.11.08** |

| Tested by: | Reviewed by: | Approved by: |
|---|---|---|
|  |  |  |
| **Xu ZhenFei** | **Liu YongHai** | **Chen HuaWen** |
| Name Signature | Name Signature | Name Signature |

**Other Aspects: NONE.**

Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested

# TABLE OF CONTENTS

# 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 ($mW/cm^2$) | 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

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

where

Pd = power density in $mW/cm^2$

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

# 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 ($mW/cm^2$) | LIMIT ($mW/cm^2$) |
|---|---|---|---|---|---|
| 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;

Address of the laboratory:

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