



## **FCC RF EXPOSURE REPORT**

*For*

**4MP Dual Band Pan/Tilt Wireless IP Camera**

**MODEL NUMBER: IP4M-1051B**

**ADDITIONAL MODEL NUMBER: IP4M-1051B-\*\*; IP4M-1051B-\*\*\*;  
IP4M-1051W; IP4M-1051W-\*\*; IP4M-1051W-\*\*\*;  
"\*" can be "A-Z", or "0-9", or blank**

**PROJECT NUMBER: 4788435051**

**REPORT NUMBER: 4788435051-5**

**FCC ID: ZZ2-AMC047**

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*Prepared for*

**Amcrest Technologies LLC**

*Prepared by*

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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Amcrest Technologies LLC  
Address: 16727 Park Row Dr, Houston, TX 77084

### Manufacturer Information

Company Name: Amcrest Technologies LLC  
Address: 16727 Park Row Dr, Houston, TX 77084

### Factory Information

Company Name: ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD  
Address: No.1199, Bin'an road, Binjiang District, Hangzhou, P.R.China.

Company Name: ZHEJIANG DAHUA ZHILIAN CO.,LTD.  
Address: No.28, Dongqiao Road, Dongzhou Street, Fuyang District, Hangzhou,P.R.China.

### EUT Description

Product Name 4MP Dual Band Pan/Tilt Wireless IP Camera  
Model Name IP4M-1051B  
Additional No. IP4M-1051B-\*\*; IP4M-1051B-\*\*\*;  
IP4M-1051W; IP4M-1051W-\*\*; IP4M-1051W-\*\*\*;  
"\*" can be "A-Z", or "0-9", or blank  
Sample Number 1542101-001  
Data of Receipt Sample April. 24, 2018  
Date Tested April. 25, 2018 ~ May. 25, 2018

#### APPLICABLE STANDARDS

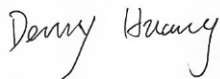
##### STANDARD

FCC Guidelines for Human Exposure IEEE  
C95.1

##### TEST RESULTS

Complies

Tested By :



Check By:



Denny Huang  
Engineer Project Associate

Shawn Wen  
Laboratory Leader

Approved By:



Stephen Guo  
Laboratory Manager

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

## 3. FACILITIES AND ACCREDITATION

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accreditation Certificate | <p><b>A2LA (Certificate No.: 4102.01)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>IAS (Lab Code: TL-702)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has demonstrated compliance with ISO/IEC Standard 17025:2005, General requirements for the competence of testing and calibration laboratories</p> <p><b>FCC (FCC Designation No.: CN1187)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p><b>IC(Company No.: 21320)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.</p> <p><b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793.</p> <p>Facility Name:<br/>Chamber D, the VCCI registration No. is G-20019 and R-20004<br/>Shielding Room B , the VCCI registration No. is C-20012 and T-20011</p> |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

**4. REQUIREMENT****LIMIT****Limits for General Population/Uncontrolled Exposure**

| Limits for General Population/Uncontrolled Exposure                                                                                                                                                                                                                                              |                                   |                                   |                                         |                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------------|-------------------------------------------------------------------|
| Frequency Range (MHz)                                                                                                                                                                                                                                                                            | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes) |
| 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/150                                   | 30                                                                |
| 1500-100,000                                                                                                                                                                                                                                                                                     | --                                | --                                | 1.0                                     | 30                                                                |
| Note 1: f = frequency in MHz, * means Plane-wave equivalent power density                                                                                                                                                                                                                        |                                   |                                   |                                         |                                                                   |
| Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure. |                                   |                                   |                                         |                                                                   |
| Note 3: The limit value 1.0mW/cm <sup>2</sup> is available for this EUT.                                                                                                                                                                                                                         |                                   |                                   |                                         |                                                                   |

**MPE CALCULATION METHOD**

$$S = PG / (4\pi R^2)$$

where: S = power density (in appropriate units, e.g. mW/ cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW) (the measured power value see Report: F12124 Section 6.6)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

**CALCULATED RESULTS**

## Radio Frequency Radiation Exposure Evaluation

## 1) For 2.4G

| WIFI (Worst case) |                         |       |              |           |               |          |             |
|-------------------|-------------------------|-------|--------------|-----------|---------------|----------|-------------|
| Mode              | Output Power to Antenna |       | Antenna Gain |           | Power Density | Limit    | Test Result |
| 11B               | (dBm)                   | (mW)  | (dBi)        | (Numeric) | (mW/cm2)      | (mW/cm2) | --          |
|                   | 15.5                    | 35.48 | 1.68         | 1.47      | 0.0104        | 1        | Complies    |

## 2) For 5.1G

| WIFI (Worst case) |                         |       |              |           |               |          |             |
|-------------------|-------------------------|-------|--------------|-----------|---------------|----------|-------------|
| Mode              | Output Power to Antenna |       | Antenna Gain |           | Power Density | Limit    | Test Result |
| 11ac 20           | (dBm)                   | (mW)  | (dBi)        | (Numeric) | (mW/cm2)      | (mW/cm2) | --          |
|                   | 18                      | 63.10 | 1.99         | 1.58      | 0.0195        | 1        | Complies    |

## 3) For 5.8G

| WIFI (Worst case) |                         |      |              |           |               |          |             |
|-------------------|-------------------------|------|--------------|-----------|---------------|----------|-------------|
| Mode              | Output Power to Antenna |      | Antenna Gain |           | Power Density | Limit    | Test Result |
| 11n40             | (dBm)                   | (mW) | (dBi)        | (Numeric) | (mW/cm2)      | (mW/cm2) | --          |
|                   | 20                      | 100  | 1.99         | 1.58      | 0.0315        | 1        | Complies    |

Note: the calculated distance is 20cm.

**END OF REPORT**