# FCC RF EXPOSURE REPORT

*For*

**IP Camera**

**MODEL NUMBER: IP3M-943B, IP3M-943W, IP3M-943S, IPM-723B, IPM-723W, IPM-723S**

**FCC ID: ZZ2AMC018AMC020**
**IC: 21923-AMC018020**
**REPORT NUMBER: 4788108769-3**

**ISSUE DATE: Nov. 14, 2017**

*Prepared for*

**Amcrest Technologies LLC**
**16727 Park Row Dr.Houston, TX 77084**

*Prepared by*

**UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch**
**Room 101, Building 10, Innovation Technology Park,**
**Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China**
**Tel: +86 769 33817100**
**Fax: +86 769 33244054**
**Website: www.ul.com**

Revision History

| Rev. | Issue Date | Revisions | Revised By |
|---|---|---|---|
| -- | 11/14/2017 | Initial Issue | |

# TABLE OF CONTENTS

# 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 |

**EUT Description**

| | |
|---|---|
| Product Name | IP Camera |
| Brand Name | AMCREST |
| Model Name | IP3M-943W |
| Serial Number | IP3M-943B;IP3M-943S;IPM-723B;IPM-723W;IPM-723S |
| Model Difference | Their electrical circuit design, layout, components used and internal wiring are identical, only the model name, color and selling area are different. |
| Sample Status: | Normal |
| Sample ID: | 11604 |
| Sample Received: | August 11, 2017 |
| Date Tested | September 11, 2017 ~ September 22, 2017 |

| APPLICABLE STANDARDS | |
|---|---|
| **STANDARD** | **TEST RESULTS** |
| FCC 47CFR§2.1091 | Complies |

Tested By:

Miller Ma
Engineer Project Associate

Checked By:

Shawn Wen
Laboratory Leader

Approved By:

Stephen Guo

Laboratory Manager

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

## 3. FACILITIES AND ACCREDITATION

| | |
|---|---|
| Test Location | UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. |
| Address | Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China |
| Accreditation Certificate | UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. The Certificate Registration Number is 4102.01.<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission).<br>The Designation Number is CN1187.<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320. |

# 4. REQUIREMENT

**LIMIT AND CALCULATION METHOD**

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

Limits for General Population/Uncontrolled Exposure

**RF EXPOSURE LIMIT**

| Frequency Range (MHz) | E-field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) ($mW/cm^2$) | Averaging Time $\|E\|^2$, $\|H\|^2$ or S (Minutes) |
|---|---|---|---|---|
| 0.3 -- 1.34 | 614 | 1.63 | (100)* | 30 |
| 1.34 -- 30 | 824/f | 2.19/f | ($180/f^2$)* | 30 |
| 30 -- 300 | 27.5 | 0.073 | 0.2 | 30 |
| 300 -- 1500 | -- | -- | f/1500 | 30 |
| 1500 -- 100,000 | -- | -- | 1.0 | 30 |

**CALCULATION METHOD**

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

Where:

S=power density

P=power input to antenna

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

**CALCULATED RESULTS**

| WIFI Mode(WORST-CASE): 11b Channel 6 | | | | | | |
|---|---|---|---|---|---|---|
| Frequency | Max.Output Power | Max Tune Up Power | | Power Density | Power Density Limit | Test Result |
| MHz | dBm | dBm | mW | $mW/cm^2$ | $mW/cm^2$ | -- |
| 2412 | 15.59 | 16 | 39.811 | 0.012545394 | 1.0 | Complies |

Note: 1. Antenna Gain=2.00dBi (Numeric 1.58), π=3.142.
2. The minimum separation distance of the device is greater than 20 cm.
3. Calculate by WORST-CASE mode.
4. Owing to the maximum Calculated Result is below the limit, so it deemed to comply with the basic restrictions without testing which means that no SAR is required.
5. Max Tune Up Power by manufacturer's declaration

## END OF REPORT