



## MPE Test Report

**Report No.:** DHQA-19NO2333VTSHPB-2

**FCC ID:** ZZ2-AMC058

**Product:** 4MP Pan/Tilt wireless IP Camera

**Test Model:** IP4M-1041W

**Serial Model:** IP4M-1041B

**Received Date:** Nov.21, 2019

**Test Date:** Nov.25 to Dec.10, 2019

**Issued Date:** Dec.23, 2019

**Applicant:** Amcrest Technologies LLC

**Address:** 16727 Park Row Dr. Houston, TX 77084

**Manufacturer:** Amcrest Technologies LLC

**Address:** 16727 Park Row Dr. Houston, TX 77084

**Issued By:** BUREAU VERITAS ADT (Shanghai) Corporation

**Lab Address:** No. 829, Xinzhuan Road, Shanghai, P.R.China (201612)

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### Release Control Record

| Issue No.             | Description      | Date Issued  |
|-----------------------|------------------|--------------|
| DHQA-19NO2333VTSHPB-2 | Original release | Dec.23, 2019 |



# 1 Certificate of Conformity

**Product:** 4MP Pan/Tilt wireless IP Camera

**Brand:** --

**Test Model:** IP4M-1041W

**Series Model:** IP4M-1041B

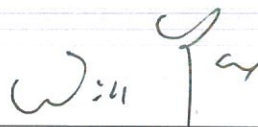
**Applicant:** Amcrest Technologies LLC

**Test Date:** Nov.25 to Dec.10, 2019

**Standards:** FCC Part 2 (Section 2.1091)  
KDB 447498 D01 General RF Exposure Guidance v06  
IEEE C95.1-1992

The above equipment has been tested by **BUREAU VERITAS ADT (Shanghai) Corporation**, 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 EMC characteristics under the conditions specified in this report.

**Prepared by :**

  
Will YAN

**Date:**

Dec.23, 2019

Project Engineer

**Approved by :**

  
Daniel SUN  
RF Supervisor

**Date:**

Dec.23, 2019

## 2 General Information

### 2.1 General Description of EUT

|                       |                                                                 |
|-----------------------|-----------------------------------------------------------------|
| Product               | 4MP Pan/Tilt wireless IP Camera                                 |
| Brand                 | --                                                              |
| Test Model            | IP4M-1041W                                                      |
| Series Model:         | IP4M-1041B                                                      |
| Model Difference      | Only product color is different                                 |
| Power Rating          | 5VDC/1A with adaptor 100-240V~,50/60Hz                          |
| Modulation Type       | CCK, DQPSK, DBPSK for DSSS<br>64QAM, 16QAM, QPSK, BPSK for OFDM |
| Modulation Technology | DSSS, OFDM                                                      |
| Operating Frequency   | See clause 3.2                                                  |
| Number of Channel     | See clause 3.2                                                  |
| Antenna Type          | IFA Antenna                                                     |
| Antenna Connector     | --                                                              |
| Antenna Gain          | 0.92dBi                                                         |

### 3 RF Exposure

#### 3.1 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 |                               |                               |                                     |                        |
| 300-1,500                                             | -                             | -                             | F/1500                              | 30                     |
| 1,500-100,000                                         | -                             | -                             | 1.0                                 | 30                     |

F = Frequency in MHz

#### 3.2 MPE Calculation Formula

Power density (S) is calculated according to the formula:

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

Where S = power density in mW/cm<sup>2</sup>

P = transmit power in mW

G = numeric gain of transmit antenna (numeric gain=Log-1(dB antenna gain/10))

R = distance (cm)

#### 3.3 MPE Calculation Formula

The antenna of this product, under normal use condition, is at least 20cm from the body of the user. So the device is classified as Mobile Device.

#### 3.4 Calculation Result of Maximum Permissible Exposure

| Frequency Band (MHz) | Max. Conducted output power(dBm) | Antenna Gain (dBi) | Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|----------------------|----------------------------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2412-2462            | 15.57                            | 0.92               | 20            | 0.00887055                          | 1                           |

#### Conclusion:

The calculation result of MPE is less than the limit.

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