



## RF Exposure Evaluation Declaration

Product Name : IP surveillance camera (Wi-Fi & mobile)  
Model No. : EN-CNUC-001b  
FCC ID : 2AQEO-1001

Applicant : Eagle Eye Networks B.V.

Address : Hogehilweg 19, 1101 CB Amsterdam, The Netherlands

Date of Receipt : Feb. 03, 2018

Issued Date : Jul. 04, 2018

Report No. : 1822021R-RF- US-P20V01

Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF, A2AL or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.

# Test Report Certification

Issued Date : Jul. 04, 2018

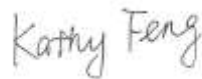
Report No. : 1822021R-RF-US-P20V01



Product Name : IP surveillance camera (Wi-Fi & mobile)  
Applicant : Eagle Eye Networks B.V.  
Address : Hogehilweg 19, 1101 CB Amsterdam, The Netherlands  
Manufacturer : Eagle Eye Networks B.V.  
Address : Hogehilweg 19, 1101 CB Amsterdam, The Netherlands  
Model No. : EN-CNUC-001b  
FCC ID : 2AQEO-1001  
EUT Voltage : 100-240Vac 0.3A max 50/60Hz  
Test Voltage : AC 230V/50Hz  
Brand Name : Eagle Eye NuboCam  
Applicable Standard : KDB 447498D01V06  
FCC Part1.1310

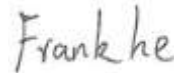
Test Result : Complied  
Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.  
Corporation - Suzhou EMC Laboratory  
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,  
215006, Jiangsu, China  
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FCC Designation Number: CN1155

Documented By :



(Project Assistant: Kathy Feng)

Reviewed By :



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Approved By :



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## 1. RF Exposure Evaluation

### 1.1.Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### 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) |
|------------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| <b>(A) Limits for Occupational/ Control Exposures</b>            |                               |                               |                                     |                        |
| 300-1500                                                         | --                            | --                            | F/300                               | 6                      |
| 1500-100,000                                                     | --                            | --                            | 5                                   | 6                      |
| <b>(B) Limits for General Population/ Uncontrolled Exposures</b> |                               |                               |                                     |                        |
| 300-1500                                                         | --                            | --                            | F/1500                              | 6                      |
| 1500-100,000                                                     | --                            | --                            | 1                                   | 30                     |

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

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

$P_d$  is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance  $r$  where the MPE limit is reached.

### 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

### 1.3. Test Result of RF Exposure Evaluation

|           |   |                                         |
|-----------|---|-----------------------------------------|
| Product   | : | IP surveillance camera (Wi-Fi & mobile) |
| Test Item | : | RF Exposure Evaluation                  |
| Test Site | : | AC-6                                    |

#### Antenna Information:

|                          |                                     |           |                                     |                                                   |                          |           |
|--------------------------|-------------------------------------|-----------|-------------------------------------|---------------------------------------------------|--------------------------|-----------|
| Antenna Delivery         | <input checked="" type="checkbox"/> | 1*TX+1*RX | <input type="checkbox"/>            | 2*TX+2*RX                                         | <input type="checkbox"/> | 3*TX+3*RX |
| Antenna technology       | <input checked="" type="checkbox"/> | SISO      |                                     |                                                   |                          |           |
|                          | <input type="checkbox"/>            | MIMO      | <input type="checkbox"/>            | Basic                                             |                          |           |
|                          |                                     |           | <input type="checkbox"/>            | Sectorized antenna systems                        |                          |           |
|                          |                                     |           | <input type="checkbox"/>            | Cross-polarized antennas                          |                          |           |
|                          |                                     |           | <input type="checkbox"/>            | Unequal antenna gains, with equal transmit powers |                          |           |
|                          |                                     |           | <input type="checkbox"/>            | Spatial Multiplexing                              |                          |           |
|                          |                                     |           | <input type="checkbox"/>            | CDD                                               |                          |           |
| <input type="checkbox"/> | Beam-forming                        |           |                                     |                                                   |                          |           |
| Antenna Type             | <input type="checkbox"/>            | External  | <input type="checkbox"/>            | Dipole                                            |                          |           |
|                          | <input checked="" type="checkbox"/> | Internal  | <input type="checkbox"/>            | PIFA                                              |                          |           |
|                          |                                     |           | <input type="checkbox"/>            | PCB                                               |                          |           |
|                          |                                     |           | <input checked="" type="checkbox"/> | Ceramic Chip Antenna                              |                          |           |
|                          |                                     |           | <input type="checkbox"/>            | Metal plate type F antenna                        |                          |           |
|                          |                                     |           | <input type="checkbox"/>            | Cross-polarize Antenna                            |                          |           |
| Antenna Gain             | -1.3dBi                             |           |                                     |                                                   |                          |           |

- **Output Power into Antenna & RF Exposure Evaluation Distance:**

**Standalone modes:**

| Test Mode          | Frequency Band (MHz) | Maximum Output Power to Antenna (dBm) | Directional Gain (dBi) | Power Density at R = 20 cm (mW/cm <sup>2</sup> ) | Power Density Limit at R = 20 cm (mW/cm <sup>2</sup> ) |
|--------------------|----------------------|---------------------------------------|------------------------|--------------------------------------------------|--------------------------------------------------------|
| Zigbee             | 2400 ~ 2483.5        | 5.28                                  | -1.3                   | 0.0005                                           | 1.0                                                    |
| 802.11b/g/n(20MHz) | 2412 ~ 2462          | 16.46                                 | -1.3                   | 0.007                                            | 1.0                                                    |

**Simultaneous transmission:**

| Test Mode                               | Frequency Band (MHz) | Maximum Output Power to Antenna (dBm) | Directional Gain (dBi) | Power Density at R = 20 cm (mW/cm <sup>2</sup> ) | Power Density Limit at R = 20 cm (mW/cm <sup>2</sup> ) |
|-----------------------------------------|----------------------|---------------------------------------|------------------------|--------------------------------------------------|--------------------------------------------------------|
| Zigbee                                  | 2400 ~ 2483.5        | 5.28                                  | -1.3                   | 0.0005                                           | 1.0                                                    |
| 802.11b/g/n(20MHz)                      | 2412 ~ 2462          | 16.46                                 | -1.3                   | 0.007                                            | 1.0                                                    |
| Simultaneous transmission power density |                      |                                       |                        | 0.0075                                           | 1.0                                                    |

Note: The simultaneous transmission power density is 0.0075 mW/cm<sup>2</sup> for IP surveillance camera (Wi-Fi & mobile) without any other radio equipment.

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