

## RF EXPOSURE REPORT

OF

**Applicant:** Deep Sentinel Corporation  
600 Main Street, Suite C, Pleasanton, CA 94566.

**Product Name:** Deep Sentinel Camera

**Brand Name:** Deep Sentinel

**Model No. / Type No.:** CAM-19001

**Model Difference:** N/A

**Report Number:** ER/2019/50027

**FCC ID** 2AO9O-CAM-19001

**FCC Rule Part** Part 2.1091

**Issue Date:** Jun. 03, 2019

**Date of Test:** May 13, 2019 ~ May 15, 2019

**Date of EUT Received:** May 13, 2019

**We hereby certify that:**

The above equipment was tested by SGS Taiwan Ltd. The test data, data evaluation in this report is in compliance with FCC Rules Part 2.

The test results of this report relate only to the tested sample identified in this report.

**Approved By:**

John Teh

**John Yeh / Assistant Manager**

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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## Revision History

| Report Number | Revision | Description                  | Effected Page | Issue Date    | Revised By |
|---------------|----------|------------------------------|---------------|---------------|------------|
| ER/2019/50027 | Rev.00   | Initial creation of document | All           | Jun. 03, 2019 | Elle Chang |

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**1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)**

General:

|                       |                                  |   |
|-----------------------|----------------------------------|---|
| Product Name:         | Deep Sentinel Camera             |   |
| Brand Name:           | Deep Sentinel                    |   |
| Model No. / Type No.: | CAM-19001                        |   |
| Hardware Version:     | N/A                              |   |
| Software Version:     | N/A                              |   |
| Power Supply:         | 3.6Vdc from rechargeable battery |   |
|                       | Battery:                         | Model No.:BAT-19001<br>Supplier:..Deep Sentinel Corp. |

**Antenna Information:**

| Antenna Type | Supplier | Main / Aux | Antenna Part No. | Freq. (MHz) | Peak Antenna Gain (dBi) | Worst Antenna Gain |
|--------------|----------|------------|------------------|-------------|-------------------------|--------------------|
| Wifi 2.4G    | N/A      | Main       | N/A              | 2.4GHz      | 3.51                    |                    |

**WLAN 2.4GHz:**

| 802.11           | Freq. Range (MHz) | Channels  | Modulation Technology | Max Average Power (dBm) | Worst Case |
|------------------|-------------------|---|-----------------------|-------------------------|------------|
| b/g/n_HT20       | 2412-2462         | 11  | DSSS & OFDM           | 17.59                   |            |
| Modulation type: |                   | CCK, DQPSK, DBPSK for DSSS<br>64QAM, 16QAM, QPSK, BPSK for OFDM |                       |                         |            |

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## 2 FCC MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### 2.1 FCC Standard Applicable

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Mobile device, the MPE is required.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for Maximum Permissive Exposure (MPE)

| Frequency Range (MHz)                               | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Averaging Time (minute) |
|---|-------------------------------|-------------------------------|-------------------------------------|-------------------------|
| Limits for General Population/Uncontrolled Exposure |                               |                               |                                     |                         |
| 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/1500                              | 30                      |
| 1500-15000  | /                             | /                             | 1.0                                 | 30                      |

f = frequency in MHz

\* = Plane-wave equipment power density

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## 2.2 Power Density Calculation (Worst Case)

| Operation Mode | Evaluation Frequency (MHz) | Operation Distance (cm) | Max. output Power (dBm) | Antenna Gain (dBi) | Max. output Power EIRP (mW) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) | Pass / Fail |
|----------------|----------------------------|-------------------------|-------------------------|--------------------|-----------------------------|-------------------------------------|-----------------------------|-------------|
| WLAN 2.4G      | 2462.00                    | 20                      | 17.59                   | 3.51               | 128.82                      | 0.026                               | 1.000                       | Pass        |

**Note:** For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band.

*~ End of Report ~*

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