

# **RF Exposure Report**

Report No.: SA171017E05

FCC ID: 2ABC8-PP300V50SE

Test Model: DT8050A-SN

Received Date: Oct. 17, 2017

Test Date: Oct. 31, 2017

**Issued Date:** Dec. 06, 2017

Applicant: Honeywell Security Sensor CoE

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# **Release Control Record**

| Issue No.   | Description       | Date Issued   |
|-------------|-------------------|---------------|
| SA171017E05 | Original release. | Dec. 06, 2017 |



### 1 Certificate of Conformity

Product: Infrared microwave sensor

Brand: Honeywell

Test Model: DT8050A-SN

Sample Status: ENGINEERING SAMPLE

Applicant: Honeywell Security Sensor CoE

Test Date: Oct. 31, 2017

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 Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, 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 : \_\_\_\_\_\_, Date: \_\_\_\_\_\_\_, Dec. 06, 2017

Wendy Wu / Specialist

**Approved by :** , **Date:** Dec. 06, 2017

May Chen / Manager



### 2 RF Exposure

# 2.1 Limits for Maximum Permissible Exposure (MPE)

| Frequency Range<br>(MHz)                              | Electric Field<br>Strength (V/m) | Magnetic Field<br>Strength (A/m) | Power Density<br>(mW/cm <sup>2</sup> ) | Average Time<br>(minutes) |
|---|----------------------------------|----------------------------------|--|---------------------------|
| 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                        |
| 1500-100,000  |                                  |                                  | 1.0                                    | 30                        |

f = Frequency in MHz; \*Plane-wave equivalent power density

#### 2.2 MPE Calculation Formula

 $Pd = (Pout*G) / (4*pi*r^2)$ 

where

Pd = power density in mW/cm<sup>2</sup>

Pout = 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

### 2.3 Classification

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

### 2.4 Antenna Gain

The antenna provided to the EUT, please refer to the following table:

| Antenna Gain (dBi) | Antenna Type         | Connector Type | Frequency range<br>(GHz) |
|--------------------|----------------------|----------------|--------------------------|
| 7                  | Integral PCB Antenna | NA             | 10.525                   |



# 2.5 Calculation Result

| Frequency<br>(MHz) | Field Strength of<br>Fundamental<br>(dBuV/m) | Pout EIRP<br>(dBm) | Pout EIRP<br>(mW) | Distance<br>(cm) | Power<br>Density<br>(mW/cm²) | Limit<br>(mW/cm <sup>2</sup> ) |
|--------------------|--|--------------------|-------------------|------------------|------------------------------|--------------------------------|
| 10525              | 114.6  | 19.37              | 86.497            | 20               | 0.01721                      | 1                              |

Note: Pout EIRP (dBm) = Field Strength of Fundamental (dBuV/m) - 95.23 (dB)

|  | <b>END</b> |  |
|--|------------|--|
|--|------------|--|