# RF Exposure Report

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|---|---|
| **Report No.:** | SA160628C04 |
| **FCC ID:** | KA2CHS165A1 |
| **Test Model:** | DCH-S165 |
| **Received Date:** | Jun. 28, 2016 |
| **Test Date:** | Jul. 04 ~ Jul. 14, 2016 |
| **Issued Date:** | Jul. 19, 2016 |
| **Applicant:** | D-LINK CORPORATION |
| **Address:** | 17595 Mt. Hermann, Fountain Valley, CA 92708,U.S.A. |
| **Issued By:** | Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch |
| **Lab Address:** | No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan |
| **Test Location:** | No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.) |

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## Release Control Record

| Issue No. | Description | Date Issued |
|---|---|---|
| SA160628C04 | Original release | Jul. 19, 2016 |

## 1 Certificate of Conformity

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|---|---|
| **Product:** | Wi-Fi Smart Sound Detector |
| **Brand:** | D-LINK ® |
| **Test Model:** | DCH-S165 |
| **Sample Status:** | Engineering sample |
| **Applicant:** | D-LINK CORPORATION |
| **Test Date:** | Jul. 04 ~ Jul. 14, 2016 |
| **Standards:** | FCC Part 2 (Section 2.1091)<br>KDB 447498 D01 (October 23, 2015)<br>IEEE C95.1 |

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 :** Nadia Wang , **Date:** Jul. 19, 2016

Nadia Wang / Specialist

**Approved by :** Ken Liu , **Date:** Jul. 19, 2016

Ken Liu / Senior Manager

## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

| Frequency Range (MHz) | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density ($mW/cm^2$) | Average Time (minutes) |
|---|---|---|---|---|
| Limits For General Population / Uncontrolled Exposure | | | | |
| 300-1500 | … | … | F/1500 | 30 |
| 1500-100,000 | … | … | 1.0 | 30 |

F = Frequency in MHz

### 2.2 MPE Calculation Formula

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

where

Pd = power density in $mW/cm^2$

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**.

## 3 Calculation Result of Maximum Conducted Power

| Max Power (dBm) | Antenna Gain (dBi) | Distance (cm) | Power Density ($mW/cm^2$) | Limit ($mW/cm^2$) |
|---|---|---|---|---|
| 21.50 | 3.01 | 20 | 0.056 | 1 |

Directional gain = 0dBi + 10log(2) = 3.01dBi

**---END---**