

## RF Exposure Report

**Report No.:** SA160705E11A

**FCC ID:** N5C90172201

**Test Model:** IC722

**Received Date:** Sep. 14, 2016

**Test Date:** Oct. 03, 2016

**Issued Date:** Oct. 20, 2016

**Applicant:** StarVedia Technology Inc.

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory

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### Release Control Record

Issue No.	Description	Date Issued
SA160705E11A	Original release.	Oct. 20, 2016

## 1 Certificate of Conformity

**Product:** Full HD IP CAM

**Brand:** StarVedia

**Test Model:** IC722

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** StarVedia Technology Inc.

**Test Date:** Oct. 03, 2016

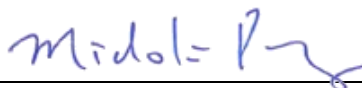
**Standards:** FCC Part 2 (Section 2.1091)

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:**

Oct. 20, 2016

Midoli Peng / Specialist

**Approved by :**



**Date:**

Oct. 20, 2016

May Chen / 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 <sup>2</sup> )	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<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

WLAN Antenna					
Brand	Model	Gain (dBi)	Antenna Type	Connector Type	Frequency range (MHz to MHz)
NA	NA	2.2	Dipole	NA	2400~2483.5
Z-Wave Antenna					
Brand	Model	Gain (dBi)	Antenna Type	Connector Type	Frequency range (MHz)
NA	NA	-20.41	Helical	NA	868~928

## 2.5 Calculation Result Of Maximum Conducted Power

### WLAN

Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	229.615	2.2	20	0.07581	1

### Z-Wave

Frequency (MHz)	Field Strength of Fundamental (dBuV/m) @3m	Pout EIRP (dBm)	Pout EIRP (mW)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
908.4-916	78.2	-17.03	0.0198	20	0.000001	0.6056

Note: 1. Pout EIRP (dBm) = Field Strength of Fundamental (dBuV/m) - 95.23 (dB)

2. Power Density Limit = F/1500

### Conclusion:

The formula of calculated the MPE is:

$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$

CPD = Calculation power density

LPD = Limit of power density

$WLAN + Z\text{-Wave} = 0.07581/1 + 0.000001/0.6056 = 0.07581$

**Therefore the maximum calculations of above situations are less than the "1" limit.**

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