



FCC ID: 2ALSZ-CL31007PCE  
Report No.: T190304E01-MF



Page 1 / 7  
Rev.: 00

**IEEE C95.1 2005  
KDB 447498 D03  
47 C.F.R. Part 1, Subpart I, Section 1.1310  
47 C.F.R. Part 2, Subpart J, Section 2.1091**

## **RF EXPOSURE REPORT**

**For**

**Photocontroller**

**Model: iSLC3100-7P-C-E**

**Trade Name: CIMCON**

*Issued to*

**CIMCON Lighting, Inc  
35 Crosby Drive, Bedford, MA 01730, USA**

*Issued by*

**Compliance Certification Services Inc.  
No.11, Wugong 6th Rd., Wugu Dist.,  
New Taipei City 24891, Taiwan. (R.O.C.)  
Issued Date: April 23, 2019**

**Note:** This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document. The client should not use it to claim product endorsement by TAF, A2LA, NIST or any government agencies. The test results in the report only apply to the tested sample.

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.  
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部分複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

### Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	April 23, 2019	Initial Issue	ALL	Allison Chen

**TABLE OF CONTENTS**

<b>1. TEST RESULT CERTIFICATION .....</b>	<b>4</b>
<b>2. LIMIT.....</b>	<b>5</b>
<b>3. EUT SPECIFICATION .....</b>	<b>5</b>
<b>4. TEST RESULTS .....</b>	<b>6</b>
<b>5. MAXIMUM PERMISSIBLE EXPOSURE.....</b>	<b>7</b>

## 1. TEST RESULT CERTIFICATION

### We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10: 2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

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

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
IEEE C95.1 2005	
KDB 447498 D03	
47 C.F.R. Part 1, Subpart I, Section 1.1310	
47 C.F.R. Part 2, Subpart J, Section 2.1091	No non-compliance noted

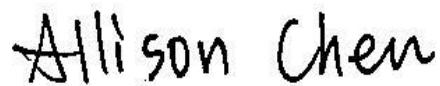
Approved by:



---

Kevin Tsai  
Deputy Manager  
Compliance Certification Services Inc.

Reporter:



---

Allison Chen  
Report coordinator  
Compliance Certification Services Inc.

## 2. LIMIT

According to §15.247(i), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this chapter.

## 3. EUT SPECIFICATION

<b>EUT</b>	Photocontroller
<b>Model</b>	iSLC3100-7P-C-E
<b>Model Discrepancy</b>	N/A
<b>Frequency band (Operating)</b>	<input type="checkbox"/> IEEE 802.11b/g/n HT20 Mode: 2.412GHz ~ 2.462GHz <input type="checkbox"/> IEEE 802.11n HT40 Mode: 2.422GHz ~ 2.452GHz <input checked="" type="checkbox"/> Zigbee: 902.4MHz ~ 927.6MHz <input type="checkbox"/> Others
<b>Device category</b>	<input type="checkbox"/> Portable (<20cm separation) <input checked="" type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others
<b>Exposure classification</b>	<input type="checkbox"/> Occupational/Controlled exposure ( $S = 5\text{mW/cm}^2$ ) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure ( $S=1\text{mW/cm}^2$ )
<b>Antenna Specification</b>	<b>For Zigbee</b> PCB Antenna Antenna 1 Gain : -1.34 dBi (Numeric gain: 0.73)
<b>Maximum tune up power</b>	Zigbee 29.00 dBm (794.328 mW)
<b>Evaluation applied</b>	<input checked="" type="checkbox"/> MPE Evaluation* <input type="checkbox"/> SAR Evaluation <input type="checkbox"/> N/A

## 4. TEST RESULTS

**No non-compliance noted.**

### Calculation

Given  $E = \frac{\sqrt{30 \times P \times G}}{d}$  &  $S = \frac{E^2}{377}$

Where  $E$  = Field strength in Volts / meter

$P$  = Power in Watts

$G$  = Numeric antenna gain

$d$  = Distance in meters

$S$  = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{377 d^2}$$

Changing to units of mW and cm, using:

$$P(\text{mW}) = P(\text{W}) / 1000 \text{ and}$$

$$d(\text{cm}) = d(\text{m}) / 100$$

Yields

$$S = \frac{30 \times (P/1000) \times G}{377 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2} \quad \text{Equation 1}$$

Where  $d$  = Distance in cm

$P$  = Power in mW

$G$  = Numeric antenna gain

$S$  = Power density in mW / cm<sup>2</sup>

## 5. MAXIMUM PERMISSIBLE EXPOSURE

Substituting the MPE safe distance using  $d = 20$  cm into Equation 1:

$$S = 0.000199 \times P \times G$$

Where  $P$  = Power in mW

$G$  = Numeric antenna gain

$S$  = Power density in mW / cm<sup>2</sup>

### Zigbee:

Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm <sup>2</sup>	Limit (mW/cm <sup>2</sup> )
915.2	794.328	0.73	20	0.1154	1.000

--End of Report--