

January 28, 2016

Ms. Vivian Wu  
Ecosense Lighting  
915 Wilshire Blvd, Suite 2175  
Los Angeles, CA 90017

Our Reference:	File	E363928
Your Reference:	Project No. 4787304851	
Subject:	Letter Report for IK09 and IK10 for Model L50	

Dear Ms. Vivian Wu:

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

This project was established to conduct IK09 and IK10 testing which included performing the following tests:

- Test for external Mechanical Impacts IK09 and IK10

Testing was conducted on LED luminaire, Model L50, in accordance with the following standards:

- IEC 60598-2-1 LUMINAIRES – PART 2-1, PARTICULAR REQUIREMENTS, FIXED GENERAL PURPOSE LUMINAIRES - Edition 1 – Revision Date 1987/01/01
- IEC 60598-1 LUMINAIRES – PART 1, GENERAL REQUIREMENTS AND TESTS - Edition 8 - Revision Date 2014/05/01
- IEC 62262 – DEGREE OF PROTECTION PROVIDED BY ENCLOSURES FOR ELECTRICAL EQUIPMENT AGAINST EXTERNAL MECHANICAL IMPACTS (IK CODE) – Edition 1- Date 2002/02/01

The tests were performed at UL's Research Triangle Park, NC facility.

UL LLC did not select the sample for testing, witness the production of the test sample, nor conduct a constructional review to IEC 60598-2-1 or to IEC 62262. UL has not established Follow-Up Service or other surveillance of the product. UL's name and marks shall not be used on or in connection with the product. The client and or manufacturer are solely and fully responsible for conformity of all products to all applicable standards, specifications or requirements.

Please understand that the issuance of this letter report does not imply any certification to IEC 60598-2-1 in conjunction with IEC 60598-1 or to IEC 62262.

This letter serves to report that the stated testing has been completed.

This concludes all work associated with this project and we are closing the referenced project. Attached to this letter are the results of the tests. If you have questions, please do not hesitate to contact the undersigned.

Very truly yours,

Warren Casper  
Senior Project Engineer  
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Reviewed by

Vincent Quiett  
Staff Engineer  
919-549-0928

## Appendix

<b>PARAMETERS</b>	
Model: L50	
Voltage: 110-277V, 50 or 60 Hz	
Lamp: LED module	
Luminaire Ambient: 25°C	
Luminaire mounting in accordance with instructions provided from manufacturer.	
<b>TESTS FOR IK09 CODE FOR LUMINAIRE</b>	
Method	Per Clause 6 of IEC 62262
Results	The luminaire enclosure and lens withstood the impact energy of 10J (IK09) without breaking. Also there were no openings in the luminaire.
<b>TESTS FOR IK10 CODE FOR LUMINAIRE</b>	
Method	Per Clause 6 of IEC 62262
Results	The luminaire enclosure and lens withstood the impact energy of 20J (IK10) without breaking. Also there were no openings in the luminaire.
<b>ELECTRIC STRENGTH TEST</b>	
Method	Per Clause 1.14 of IEC 60598-2-1 (Clause 10.2.2 of IEC 60598-1)
Results	Electric Strength Testing was conducted at 1554V (1000 + 2*277) and complied with the requirements of the standard.

**PHOTOS**

**Front View**



**Back View**



**Close-up View of Lens**



**Means of Adjustment and End View**

