

OUTDOOR LIGHTING ACCEPTANCE TESTS

CEC-NRCA-LTO-02-A (Revised 06/13)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF ACCEPTANCE		NRCA-LTO-02-A
Outdoor Lighting Acceptance Tests		(Page 1 of 2)
Project Name:	Enforcement Agency:	Permit Number:
Project Address:	City:	Zip Code:

<i>Note: Submit one Certificate of Acceptance for each system that must demonstrate compliance.</i>	Enforcement Agency Use: Checked by/Date
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NA7.8.1.2 Outdoor Motion Sensor Acceptance	
Intent:	Luminaires that can accept an incandescent lamp (for instance, screw-base fixtures) rated over 100W are controlled with a motion sensor per Section 130.2(a). Luminaires mounted 24 feet or below are controlled with a motion sensor per Section 130.2(c)3A
A. Construction Inspection	
1.	Motion Sensor Construction Inspection
<input type="checkbox"/>	Motion sensor has been located to minimize false signals
<input type="checkbox"/>	Sensor is not triggered by motion outside of controlled area
<input type="checkbox"/>	Desired motion sensor coverage is not blocked by obstruction that could adversely affect performance
<input type="checkbox"/>	The lighting power of each luminaire is set to reduce by at least 40 percent but no more than 80 percent, in the unoccupied condition
<input type="checkbox"/>	No more than 1,500 watts of lighting power is controlled together, by the same sensor or group of sensors
B. Functional testing	
1.	Simulate motion of a pedestrian in area under lights controlled by the motion sensor. Verify and document the following:
<input type="checkbox"/>	Status indicator operates correctly.
<input type="checkbox"/>	Lights controlled by motion sensors turn on immediately upon entry into the area lit by the controlled lights near the motion sensor
<input type="checkbox"/>	Signal sensitivity is adequate to achieve desired control
2.	Simulate no motion in area with lighting controlled by the sensor but with pedestrian motion adjacent to this area. Verify and document the following:
<input type="checkbox"/>	The occupant sensor does not trigger a false "on" from movement outside of the controlled area
<input type="checkbox"/>	Signal sensitivity is adequate to achieve desired control.

NA7.8.2 Outdoor Lighting Automatic Shut-off Controls Acceptance	
Intent: All installed outdoor lighting shall be controlled by a photocontrol or outdoor astronomical time-switch control that automatically turns OFF the outdoor lighting when daylight is available, per Section 130.2(c)1. All outdoor lighting shall also be controlled by an automatic scheduling control that automatically turns OFF the lighting outside of business hours or occupied times. Certain types of outdoor lighting shall also be controlled by motion sensor controls. Outdoor lighting shall be circuited separately from other electrical loads.	
C. Construction Inspection	
1.	Outdoor Lighting Daytime Shut-off Controls
<input type="checkbox"/>	All outdoor lighting is controlled either by a photocontrol or outdoor astronomical time-switch control that automatically turns OFF the outdoor lighting when daylight is available
<input type="checkbox"/>	Astronomical time switch controls and photocontrols have been certified to the Energy Commission in accordance with the applicable provision in Standards Section 110.9. Verify that model numbers of all such controls are listed on the Energy Commission database as "Certified Appliances & Control Devices."
<input type="checkbox"/>	If an astronomical time switch is installed, the ON and OFF times should be within 99 minutes of sunrise and sunset. Verify that the controller is programmed with the location of the site, local date and time. Disconnect controller from power source, reconnect, and verify that all programmed settings are retained.
2.	Outdoor Lighting Scheduling (Night-Time Shut Off) Controls
<input type="checkbox"/>	All outdoor lighting is controlled by a scheduling control, which is either a time clock or astronomical time clock. .

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Outdoor Lighting Acceptance Tests		(Page 2 of 2)
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	<input type="checkbox"/>	Controls are programmed with acceptable weekday, weekend, and holiday (if applicable) schedules
	<input type="checkbox"/>	Controls have been certified to the Energy Commission in accordance with the applicable provision in Standards Section 110.9. Verify that model numbers of all such controls are listed on the Energy Commission database as "Certified Appliances & Control Devices."
	<input type="checkbox"/>	Demonstrate and document for the owner time switch programming including weekday, weekend, holiday schedules as well as all set-up and preference program settings
3.		Lighting systems that meet the criteria of Section 130.2(c)4 and 5 of the Standards shall have <u>at least one of the following</u> :
	<input type="checkbox"/>	A part-night outdoor lighting control as defined in Section 100.1, which meets the functional requirements of NA7.7.2.4
	<input type="checkbox"/>	Motion sensors capable of automatically reducing lighting power by at least 40 percent but not exceeding 80 percent, which have auto-ON functionality, and which meets the requirements of NA7.7.1
	<input type="checkbox"/>	A centralized time-based zone lighting control capable of automatically reducing lighting power by at least 50 percent. This control shall be certified to the Commission in accordance with the applicable provision in Standards section 110.9. Verify that model numbers of all such controls are listed on the Energy Commission database as "Certified Appliances & Control Devices."
D. Functional Testing		
1.		Outdoor Lighting Daytime Shut-off Controls
	<input type="checkbox"/>	Controlled lights are off during daylight hours.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

- I certify that this Certificate of Acceptance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:	
Documentation Author Company Name:	Date Signed:	
Address:	CEA/HERS/ATT Certification Identification (If applicable):	
City/State/Zip:	Phone:	

FIELD TECHNICIAN'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Acceptance is true and correct.
2. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician).
3. The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building.

Field Technician Name:	Field Technician Signature:	
Field Technician Company Name:	Position with Company (Title):	
Address:	ATT Certification Identification (if applicable):	
City/State/Zip:	Phone:	Date Signed:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance.
2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement (responsible acceptance person).
3. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building.
5. I will ensure that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Acceptance Person Name:	Responsible Acceptance Person Signature:	
Responsible Acceptance Person Company Name:	Position with Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed: