Lighting – Single Family Dwellings

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LIFORNIA ENERGY COMMISSION	

CEC-CF2	R-LTG-0	1-E (Revise	d 10/16)

EC-CF2R-LTG-01-E (Revised 10/16) CALIFORNIA ENERGY COMMISSION				
CERTIFICATE OF INSTALLATION	CF2R-LTG-01-E			
Lighting – Single Family Dwellings		(Page 1 of 3)		
Project Name:	Enforcement Agency:	Permit Number:		
Dwelling Address:	City:	Zip Code:		

Α 1	and the distribution and Controls	
	stalled Lighting and Controls	
Selec	ct Yes or No according to whether your work on the project includes each of the following types of lighting and controls.	
	Sections B through H for applicable requirements.	Y or N
01	High Efficacy luminaires installed in any interior rooms. (See Section B.)	
02	JA8 compliant luminaires and controls installed in any interior rooms. (See Section B.)	
03	Recessed downlight luminaire in ceilings in any interior rooms. (See Section C.)	
04	Screw-based luminaires installed in any interior rooms. (See Section D.)	
05	Lighting and controls in bathrooms. (See Section E.)	
06	Lighting and controls in laundry rooms. (See Section E.)	
07	Lighting and controls in utility rooms. (See Section E.)	
08	Lighting and controls in garage. (See Section E.)	
09	Outdoor lighting and controls. (See Section H.)	
10	Blank electrical boxes installed more than 5 feet from finished floor. (See Section F.)	
11	Internally illuminated address signs. (See Section G.)	

B. Hi	gh Efficacy Luminaires and Controls
	All luminaires are installed with:
01	☐ Light sources of one of the light source technologies under the "High Efficacy" column of Table 150.0-A; or
	☐ JA8 compliant light sources and the light sources are marked with a label reading "JA8-2016" or "JA8-2016-E".
02	150.0(k)2K: Dimmers or vacancy sensors control all luminaires required to have JA8 compliant light sources.
03	150.0(k)2A: Forward phase cut dimmers used shall comply with NEMA SSL 7A.
The r	esponsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

C. Re	ecessed Downlight Luminaires in Ceilings
01	150.0(k)1Cvi: Contain JA8 compliant light sources that are marked with a label reading "JA8-2016-E".
02	150.0(k)1Ci: Listed for zero clearance insulation contact (IC).
03	150.0(k)1Cii: Has label certifying air tight.
04	150.0(k)1Ciii: Sealed with a gasket or caulk between the luminaire housing and ceiling, and all air leakage paths between conditioned and
04	unconditioned spaces are sealed with a gasket or caulk.
05	150.0(k)1Civ: Allows ballast maintenance and replacement to be readily accessible to building occupants from below the ceiling without
03	requiring the cutting of holes in the ceiling.
06	150.0(k)1Cv: Do not contain screw based sockets.
The	responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

D. A	dditional Luminaire Requirements
	150.0(k)1G: Screw based luminaires are installed with all of the following requirements:
01	☐ The luminaire is not recessed downlight luminaire in ceilings; and
	☐ The luminaire contains a JA8 compliant lamps
02	150.0(k)1H: No light sources marked "not for use in enclosed fixture" or "not for use in recessed fixture" are installed in enclosed
02	luminaires.
03	150.0(k)1D: Ballasts for fluorescent lamps rated 13 Watts or greater are electronic.
04	150.0(k)1E: Night lights are rated to consume no more than 5 Watts of power.
05	150.0(k)1F: Lighting integral to exhaust fans meets all applicable requirements of Section 150.0(k).
The	responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

Registration Number: Registration Date/Time: HERS Provider:

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E. Ac	dditional Lighting Controls
01	150.0(k)2J: In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces are controlled by a
01	vacancy sensor.
02	150.0(k)2A: Forward phase cut dimmers used shall comply with NEMA SSL 7A.
03	150.0(k)2B: Exhaust fans are switched separately from lighting systems, or can be switched OFF in accordance with EXCEPTION.
04	150.0(k)2C: Luminaires are switched with readily accessible controls that permit luminaires to be manually switched ON and OFF.
05	150.0(k)2D: Lighting controls and equipment are installed in accordance with manufacturer's instructions
06	150.0(k)2E: No controls are installed that bypass a dimmer or vacancy sensor function where that dimmer or vacancy sensor has been
00	installed to comply with Section 150.0(k)
07	150.0(k)2F: Lighting control devices have been Certified to the Energy Commission as applicable; lighting control systems comply with the
07	applicable requirements in Section 110.9.
	150.0(k)2G: Energy Management Control Systems used to comply with dimmer requirements provide the functionality of a dimmer in
80	accordance with Section 110.9, meet the installation certificate requirements in Section 130.4, the EMCS requirements in Section 130.5,
	and comply with all other applicable requirements in Section 150.0(k)2.
	150.0(k)2H: Energy Management Control Systems used to comply with vacancy sensor requirements in Section 150.0(k) provide the
09	functionality of a vacancy sensor in accordance with Section 110.9, meet the installation certificate requirements in Section 130.4, the
	EMCS requirements in Section 130.5, and comply with all other applicable requirements in Section 150.0(k)2.
10	150.0(k)2I: A multi-scene programmable controller used to comply with dimmer requirements provides the functionality of a dimmer in
10	accordance with Section 110.9, and complies with all other applicable requirements in Section 150.0(k)2.
11	150.0(k)2L: Undercabinet lighting is switched separately from other lighting system.
The r	esponsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

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150.0(k)2: The number of blank electrical boxes installed more than five feet above the finished floor, are not greater than the number of bedrooms. The blank boxes are served by dimmer, vacancy sensor, or fan speed control.

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

G. Address Signs			
	150.0(k	4: Internally illuminated address signs. Internally illuminated address signs shall either:	
01	a.	Comply with Section 140.8. Applicable nonresidential sign lighting compliance forms shall also be submitted; or	
	b.	Consume no more than 5 Watts of power, determined according to Section 130.0(c).	
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.			

H. S	ingle Fam	nily Outdoor Lighting	
01	150.0(k)	1A: High efficacy outdoor lighting is installed.	
	150.0(k)3A: Outdoor lighting is controlled by a manual ON and OFF switch and one of the following automatic control types:		
02		Photocontrol and motion sensor;	
		Photocontrol and automatic time switch control;	
		Astronomical time clock that automatically turns the lighting OFF during daytime hours;	
		Energy management control system (EMCS) that provides the functionality of an astronomical clock, does not have an override	
		that allows the luminaire to be always ON, and is programmed to automatically turn outdoor lighting off during daytime hours.	
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.			

Registration Date/Time: Registration Number: **HERS Provider:** STATE OF CALIFORNIA

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CEC-CF2R-LTG-01-E (Revised 10/16)	CALIFORNIA ENERGY COMMISSION		
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DOCUMENTATION AUTHOR'S DECLARATION STATE MENT			
1. I certify that this Certificate of Installation documentation is accurate and complete.			
Documentation Author Name:	Documentation Author Signature:		
Documentation Author Company Name:	Date Signed:		
Address:	CEA/HERS Certification Identification (if applicable):		
City/State/Zip:	Phone:		

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

- The information provided on this Certificate of Installation is true and correct.
- I am either: a) a responsible person 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 Installation, and attest to the declarations in this statement, or b) I am an authorized representative of the responsible person and attest to the declarations in this statement on the responsible person's behalf.
- The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to therequirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency.
- I will ensure that a registered copy of this Certificate of Installation 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 registered copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building wner at occupancy.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

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CF2R-LTG-01-E User Instructions

There are two version of the residential lighting Certificate of Installation. This version, the CF2R-LTG-01-E, is primarily used for demonstrating compliance with the residential lighting Standards for single-family dwellings.

The LTG-01 shall also be used to demonstrate compliance with the residential lighting requirements for high-rise residential dwelling units; outdoor lighting that is attached a high-rise residential or hotel/motel building, and is separately controlled from the inside of a dwelling unit or guest room; fire station dwelling accommodations; hotel and motel guest rooms; and, dormitory and senior housing dwelling accommodations. When using the CF2R-LTG-01-E to demonstrate compliance with the lighting in the dwelling units, compliance with lighting that is not in the dwelling units, such as lighting in common areas, shall be demonstrated using the nonresidential lightingcompliance documentation.

The other version of the residential lighting Certificate of Compliance, the CF2R-LTG-02-E, is used for demonstrating compliance with the residential lighting Standards for low-rise multi-family dwellings. The primary difference between the LTG-02 and LTG-01 is that the LTG-02 includes additional requirements for demonstrating compliance with residential outdoor lighting, and common areas associated with low-rise multi-family dwelling units.

Section A. Installed Lighting and Controls

This table is used to identify the scope of the work being covered by the responsible person signing this document. One person may be responsible for all of the measures in this table, or several people may each be responsible for only a portion of the measures. If several people are responsible, each person must separately fill out this Certificate of Installation for those measures for which they are responsible. In some situations, such as for alterations and additions, only some of the measures may be included in the total scope of work.

For rows 1 through 11 – insert 'Y' for each measure that is included in the scope of work, and insert 'N' for each measure that is not included in the scope of work.

Section B. High Efficacy Luminaires and Controls

This table is a list of mandatory requirements for high efficacy luminaires.

Section C. Recessed Downlight Luminaires in Ceilings

This table is a list of mandatory requirements for recessed downlight luminaires in ceilings.

Section D. Additional Luminaire Requirements

This table is a list of additional requirements for luminaires.

Section E. LED Luminaires

This table is a list of mandatory requirements for LED luminaires.

Section F. Blank Electrical Boxes

This table is a list of mandatory requirements for blank electrical boxes.

Section G. Address Signs

This table is a list of mandatory requirements for address signs.

Section H. Single Family Outdoor Lighting

This table is a list of mandatory requirements for single family outdoor lighting.