CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)
Project Name:	Date Prepared:

A. General Information						
Climate Zone:	Conditioned Floor Area:					
	Unconditioned Floor Area:					
Building Type:	☐	Nonresidential	☐	High-Rise Residential	☐	Hotel/Motel
☐ Schools	☐	Relocatable Public Schools	☐	Conditioned Spaces	☐	Unconditioned Spaces
Phase of Construction:	☐	New Construction	☐	Addition	☐	Alteration
Method of Compliance:	☐	Complete Building	☐	Area Category	☐	Tailored
Project Address:						

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
☐	☐	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
☐	☐	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
☐	☐	NRCC-LTI-03-E	Indoor Lighting Power Allowance
☐	☐	NRCC-LTI-04-E	Tailored Method Worksheets
☐	☐	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
☐	☐	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces			Indoor Lighting Power for Unconditioned Spaces		
		Watts			Watts	
01	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+		**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+				
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-		Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	
04	Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3)	=		Adjusted **Installed** Lighting Power (row 1 minus row 3)	=	
	Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)			Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)		
05	**Allowed** Lighting Power Conditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2			**Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Compliance Document/Title	
☐	☐	NRCI-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
☐	☐	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector
☐	☐	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
☐	☐	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐ Field Inspector
☐	☐	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
☐	☐	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Compliance Document/Title	
☐	☐	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
☐	☐	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
☐	☐	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector
☐	☐	NRCA-LTI-05-A – Must be submitted for institutional tuning power adjustment factor (PAF).	☐ Field Inspector

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:

☐ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

☐ The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.

☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.

☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines

☐ Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

☐ This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.

☐ This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office

☐ Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/ft^2							Office Location	Field Inspector	
1	2	3	4	5	6	7	8	9	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Number of Luminaires	Installed portable luminaire watts in this office (G02 x G03)	Square feet of this office	Watts per square foot (G04 / G05)	If G06 ≤ 0.3, enter zero; if G06 > 0.3, (G06-0.3)	(G05 x G07)	Identify Office area in which these portable luminaires are installed	Pass	Fail
									☐	☐
									☐	☐
									☐	☐
									☐	☐
									☐	☐
Total installed portable luminaire watts that are greater than 0.3 W/ft^2 per office:								Enter sum total of all pages into NRCC-LTI-01-E; Page 1		

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name:	Date Prepared:

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:

☐ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts					Location	Field Inspector [1]	
01	02	03	04		05	06	07	08	
Name or Item Tag	Complete Luminaire Description (i.e, 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per Luminaire	How wattage was determined: CEC Default from NA8	How wattage was determined: According to §130.0(c)	Number Luminaires	Total Installed Watts in this area (H03 x H05)	Primary Function area in which these luminaires are installed	Pass	Fail
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
INSTALLED WATTS PAGE TOTAL:							Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)
Project Name:	Date Prepared:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA 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:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be 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 completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Responsible Designer Signature:
Company :	Date Signed:
Address:	License:
City/State/Zip:	Phone:

NRCC-LTI-01-E User Instructions

This compliance document has multiple pages. Each page must appear on the plans (usually near the front of the electrical drawings). A copy of the document should also be submitted to the enforcement agency along with the rest of the compliance submittal at the time of building permit application. With enforcement agency approval, the applicant may use alternative formats of these documents (rather than the official Energy Commission documents), provided the information is the same and in a similar format.

Section A. General Information

- Project Address is the address of the project as shown on the plans and as known to the enforcement agency.
- Climate Zone is the California climate zone in which the project is located. See Reference Joint Appendix JA2 for a listing of climate zones.
- Building CFA is the total conditioned floor area of the building as defined in §100.1(b). For additions, the total conditioned floor area is the total area of the addition alone. For alterations, the total conditioned floor area refers to only to the altered floor area.
- Unconditioned Floor Area is the total floor area of unconditioned space, as defined in §100.1(b). For additions, the total unconditioned floor area refers to the addition alone. For alterations, the total unconditioned floor area refers to the altered floor area.
- "Building Type" is specified because there are special requirements for high-rise residential and hotel/motel guest room occupancies. All other occupancies that fall under the Nonresidential Standards are designated "Nonresidential" including schools. It is possible for a building to include more than one occupancy type. See §100.1(b) for the formal definitions of these occupancies. All appropriate boxes shall be checked:
    - **Nonresidential** if the project includes nonresidential indoor lighting.
    - **High-Rise Residential** if the project includes common areas of a high-rise residential building. Common areas are any interior areas which are not dwelling units. If this project also includes dwelling units, the residential lighting compliance documentation must also be completed and submitted.
    - **Hotel/Motel** if the project includes common areas in a hotel or motel. Common areas of a hotel/motel include any interior areas which are not dwelling units. If the project also includes dwelling units, the low-rise residential lighting compliance documentation must also be completed and submitted.
    - **Schools**, which includes relocatable buildings on the school site.
    - **Conditioned Spaces** as defined in §100.1(b).
    - **Unconditioned Spaces** as defined in §100.1(b).
- **Phase of Construction** indicates the status of the building project described in the compliance documents.
    - **New Construction** should be checked for all newly constructed buildings, newly conditioned space or for new construction to existing buildings (tenant improvements).
    - **Addition** should be checked for an addition that is not treated as a stand-alone building.
    - **Alteration** should be checked for alterations to an existing building lighting system in accordance with §141.0(b). This includes Entire Luminaire Alterations in accordance with §141.0(b)2I; Luminaire Component Modifications in accordance with §141.0(b)2k. Note that tenant improvements are usually alterations.
- **Method of Compliance** indicates the method of compliance used for the project. See Nonresidential Compliance Manual Chapter 5 for additional information.
    - **Complete Building Method**
    - **Area Category Method**
    - **Tailored Method**

Section B. Lighting Compliance Documents
Check all appropriate boxes on the bottom of page 1 to indicate which compliance documents are included in the nonresidential lighting compliance documentation package.

Section C. Summary of Allowed Lighting Power Compliance
A lighting design complies with the lighting power requirements if the installed lighting power is less than or equal to the allowed lighting power. This summary table is used to calculate and document if the project complies with the lighting power requirements.
Because lighting power tradeoffs are not allowed between conditioned and unconditioned spaces, indoor lighting power for conditioned spaces is documented only on the left side of the table, while indoor lighting power for unconditioned spaces is documented only on the right side of the table.
The values inserted into this table must be calculated and documented on other pages of the lighting compliance documents, as follows:

Allowed Lighting Power for Conditioned Spaces
To document allowed lighting power for indoor conditioned spaces, use only supporting compliance documents which have been checked as conditioned space, and use that information to fill out the left side of the table as follows:

1. Enter the sum total installed lighting power calculated on the bottom of page 4 of NRCC-LTI-01-E
2. Only for offices, enter the sum total installed portable luminaire watts that are greater than 0.3 watts per square foot per office, as calculated in section B on page 3 of NRCC-LTI-01-E.
3. Enter the lighting control credits for conditioned spaces, as calculated on the bottom of page 2 of NRCC-LTI-02-E
4. Calculate the adjusted installed lighting power by adding the numbers in rows 1 and 2 together, then subtracting the number in row 3.
5. Enter the allowed lighting power, documented in section A; page 1 of NRCC-LTI-03-E

The project complies with the allowed lighting power for indoor conditioned spaces only if the number in row 4 is equal to or smaller than the number in row 5.

Allowed Lighting Power for Unconditioned Spaces
To document allowed lighting power for indoor unconditioned spaces, use only supporting compliance documents which have been checked as unconditioned space, and use that information to fill out the right side of the table as follows:

1. Enter the sum installed lighting power calculated on the bottom of page 4 of NRCC-LTI-01-E
2. This row is not used for unconditioned spaces
3. Enter the lighting control credits for unconditioned spaces, as calculated on the bottom of page 2 of NRCC-LTI-02-E
4. Calculate the adjusted installed lighting power by subtracting the number in row 3 from the number in row 1
5. Enter the allowed lighting power, documented in section A; page 1 of NRCC-LTI-03-E

The project complies with the allowed lighting power for indoor unconditioned spaces only if the number in row 4 is equal to or smaller than the number in row 5.

Section D. Declaration of Required Certificates of Installation
In addition to the Certificates of Compliance, the Standards also require a number of Certificates of Installation to be submitted to the authority having jurisdiction.
This section of the compliance documentation serves as an acknowledgement of, and a declaration that Certificates of Installation are required to be submitted for compliance with the nonresidential lighting Standards. The boxes must be checked for every Certificate of Installation that applies to the job.
The required nonresidential indoor lighting Certificates of Installation include the following:

- NRCI-LTI-01-E - must be submitted for all buildings. This is the general Certificate of Installation used to declare what was proposed in the Certificates of Compliance is actually what was installed.

In addition to the NRCI-LTI-01-E, the following Certificates of Installation are also required if the job includes any of the measures covered by these Certificates of Installation. If any of the requirements in any of these Certificates of Installation fail the respective installation requirements, then that application shall not be recognized for compliance with the lighting Standards.

- NRCI-LTI-02-E - Must be submitted whenever a lighting control system, and whenever an Energy Management Control System (EMCS), has been installed to comply with any of the lighting control requirements in the Standards.
- NRCI-LTI-03-E - Must be submitted whenever a line-voltage track lighting integral current limiter, and whenever a supplementary overcurrent protection panel, has been installed and used to determine the installed wattage of any line-voltage track lighting system. Note that a supplementary overcurrent protection panel shall be recognized for use only with line-voltage track lighting.

Note: In addition to submitting the NRCI-LTI-03-E after installation, the Standards require the NRCC-LTI-05-E (Line-Voltage Track Lighting Worksheet) to be included with the Certificates of Compliance whenever any type of line-voltage track lighting is installed in a project.

- NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.
- NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.
- NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.

Section E. Declaration of Required Certificates of Acceptance

Before an occupancy permit shall be granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor and outdoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance.
This section of the compliance documentation serves as an acknowledgement of, and as a declaration that Certificates of Acceptance are required to be submitted for compliance with the nonresidential lighting Standards. The boxes must be checked for every Certificate of Acceptance that applies to the job.
See section 5.4.6 of this chapter for additional information.

Instructions to the Designer:
The Acceptance Test forms are to be used by the designer and attached to the plans.
The tester is required to check the acceptance tests and list all control devices serving the building, or space, shall be certified as meeting the Acceptance Requirements for Code Compliance. If all the lighting systems or controls of certain types require a test, list the different lighting and the number of systems. The NA7 Section in the Nonresidential Reference Appendices Manual describes the test. Compliance documents can be grouped by type of Luminaire controlled.

For the Enforcement Agency:
The Certificates of Acceptance compliance documents are not considered complete and are not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. The field inspector must receive the properly filled out and signed compliance documents before the building can receive final occupancy. A copy of the Certificates of Acceptance must be provided to the owner of the building for their records.
The required nonresidential indoor lighting Certificates of Acceptance include the following:

- NRCA-LTI-02-E - Must be submitted whenever occupancy sensors or automatic time switch controls are installed.
- NRCA-LTI-03-E - Must be submitted whenever automatic daylight controls are installed.
- NRCA-LTI-04-E - Must be submitted whenever demand responsive lighting controls are required by the Standards.
- NRCA-LTI-05-E - Must be submitted whenever institutional tuning power adjustment factors are installed.

Section F. Indoor Lighting Schedule and Field Inspection Energy Checklist
The check boxes serve as declaration statements for which the person signing the document is taking responsibility. All relevant boxes are required to be checked.

Section G. Installed Portable Luminaires in Offices – Exception to §140.6(a)
Planned portable lighting in offices is treated differently than planned portable lighting in all other function areas. This section is used to calculate and document any office spaces in which there are plans to install portable lighting.
Planned portable lighting in all other function areas (function areas which are not defined by §100.1(b) of the Standards as offices shall be entered directly into the luminaire schedule in Section C, of NRCC-LTI-01-E.
The portable lighting in each office must be calculated on separate rows, as follows:

1. **Complete Luminaire Description** – this is a description sufficient to identify the luminaire
2. **Watts per Luminaire** – portable luminaires shall be classified and input wattage shall be determined in accordance with §130.0(c)
3. **Number of Luminaires** – This is the number of planned portable luminaires in this particular office.
4. **Installed Portable Luminaire Watts in this Office** – This shall be calculate by multiplying the watts per portable luminaire in G02 by the number of luminaires in G03.
5. **Square Feet of the Office** – This is the square feet of only the office represented on this row of the table.
6. **Watts per Square Foot** – this is calculated by dividing the installed portable luminaire watts in this office from G04 by the square feet of office from G05.
7. Calculate any planned portable lighting for this office that is in excess of 0.3 watts per square foot. If the number in G06 is less than or equal to 0.3 watts per square foot, enter zero in this cell. If the number in G06 is more than 0.3 watts per square foot, then subtract 0.3 from the number in G06 and enter that number in G07.
8. **Accountable Watts** – Calculate accountable watts by multiplying the square feet of office in G05 times the number in G07.
9. **Office Location** – Identify this office area
10. Check boxes are available for the field inspector to pass or fail the documentation and calculation of installed portable luminaires.

The sum total of office planned portable luminaire watts, which are greater than 0.3 watts per square foot of per office, shall be entered on the bottom of this section. That sum total number shall also be inserted into the summary of lighting power compliance table, row 2, on the NRCC-LTI-01-E.

Section H. Indoor Lighting Schedule and Field Inspection Energy Checklist
This section serves the purpose of documenting the luminaire schedule, calculating installed watts, and check boxes used by the field inspect to pass or fail the documentation and calculation of all of the installed luminaires for the job. This luminaire schedule shall include all permanently installed lighting, and all planned portable lighting in rooms which are not offices.
The lighting in each function area must be calculated on separate rows. However, rooms which are typical (typical means having the identical function area as defined in §100.1(b) of the Standards, as well as having the identical lighting system) may be combined into a single row, provided the combined information is clear to the building inspector.
Fill out each separate row as follows:

1. **Name of Item Tag** - is the name or symbol used on the plans to identify the luminaire.
2. **Complete Luminaire Description** - is a complete description of the luminaire, including the type of luminaire, number and type of lamps in the luminaire, and number and type of ballast(s) in the luminaire.
3. **Watts per Luminaire** – luminaires shall be classified and watts shall be determined in accordance with §130.0(c); or an alternate method to determine luminaire watts is to use default wattage specifically listed in Reference Nonresidential Appendix NA-8. See section 5.3 of this chapter for additional information.

4. **How Wattage was Determined** - Check the appropriate box to indicate if wattage was determined in accordance with Reference Nonresidential Appendix NA-8 or §130.0(c).
5. **Number of Luminaires** – is the number of luminaires of this type for the function area identified on this row.
6. **Total Installed Watts in this Area** – is calculated by multiplying the watts per luminaire in H03, by the number of luminaires in H05.
7. **Location** – Identify the location of the luminaire so that the inspector can locate this primary function area.
8. Check boxes used by field inspector to pass or fail the documentation and calculation of installed luminaires.

The sum total wattage of installed luminaires documented on this page shall be inserted into the cell at the bottom of H06. Enter the same number into the cell on the bottom of H08.
If more than one page is required to document and calculate the wattage of all installed luminaires, enter the total wattage from all of these pages into the cell at the bottom of H08.
Enter the sum total installed lighting wattage (the number in the cell at the bottom of H08) into the summary of lighting power compliance table, row 1, on the NRCC-LTI-01-E.

Documentation Author's Declaration Statement
The "documentation author" is the person who prepares a Title 24 Part 6 compliance document that must subsequently be reviewed and signed by a responsible person (see below) in order to certify compliance with Part 6. Subject to the requirements of §10-103(a)1 and §10-103(a)2, the person who prepares the Certificate of Compliance documents (documentation authors) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete.
A documentation author may have additional certifications such as a Certified Energy Analyst certification number. Enter number in the CEA# field provided, if applicable.
The person's telephone number is given to facilitate response to any questions that arise.

Responsible Person's Declaration Statement
The "responsible person" signing the Certificate of Compliance is required to be eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design, to certify compliance with Part 6. If more than one person has responsibility for the building design, each person (such as an eligible lighting designer) shall sign the Certificate of Compliance document(s) applicable to that portion of the design for which the person is responsible. Alternatively, the person with chief responsibility for the building design shall prepare and sign the Certificate of Compliance document(s) for the entire building design.
The person's telephone number is given to facilitate response to any questions that arise.