


## REVISIONS



**19098.M00**

**TURPIN & RATTAN**  
ENGINEERING, INC.

CONSULTING ENGINEERS

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NORWALK LA MIRADA UNITED SCHOOL DISTRICT  
**LA MIRADA HIGH SCHOOL NEW FOOTBALL  
STADIUM PROJECT**  
FEDERAL FUNDING - LA MIRADA, CA 90638

**DSA # 03-120551**

**NAC**  
ARCHITECTURE

NAC NO. 161-19015  
DATE 12/10/2020

DSA BACKCHECK  
SUBMISSION

TITLE 24  
DOCUMENTATION  
(LIGHTING) -  
BUILDING "X"

## EO.14

STATE OF CALIFORNIA

Indoor Lighting

NRCC-LTIE (Created 11/19)

CERTIFICATE OF COMPLIANCE

This document is used to demonstrate compliance with requirements in §110.5, §110.12(c), §130.0, §130.1, §140.6, and §141.0(b)(2) for indoor lighting scopes using the prescriptive path.

Project Name: La Mirada High School New Football Stadium - BUILDING X

Project Address: 13520 Adelfa Dr.

California Energy Commission

NRCC-LTIE

Report Page: 1 of 6

Date Prepared: 2020-02-25

A. GENERAL INFORMATION

01 Project Location (city)

La Mirada

04 Total Conditioned Floor Area (ft<sup>2</sup>)

05 Total Unconditioned Floor Area (ft<sup>2</sup>)

02 Climate Zone

9

06 # of Stories (Habitable Above Grade)

03 Occupancy Types Within Project (select all that apply):

☐ Office
☐ Retail
☐ Warehouse
☐ Hotel/Motel
☒ School
☐ Support Areas

☐ Parking Garage
☐ High-Rise Residential
☐ Relocatable
☐ Healthcare
☐ Other (write in):

B. PROJECT SCOPE

Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)(2) for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".

Scope of Work	Conditioned Spaces	Unconditioned Spaces		
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft <sup>2</sup> )	Calculation Method	Area (ft <sup>2</sup> )
<input checked="" type="checkbox"/> New Lighting System	Area Category	196		
<input type="checkbox"/> Altered Lighting System				
<b>Total Area of Work (ft<sup>2</sup>)</b>		<b>196</b>		

C. COMPLIANCE RESULTS

Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)(1).	Allowed Lighting Power per §140.6(b) (Watts)					=	Total Allowed (Watts)	≥	Adjusted Lighting Power per §140.6(a) (Watts)			=	Total Adjusted (Watts) *Includes Adjustments	05 Must be ≥ 08 §140.6
	01	02	03	04	05				06	07	08			
Complete Building §140.6(c)(1)	Area Category §140.6(c)(2)	Area Category Additional §140.6(c)(2)(+)	Tailored §140.6(c)(+)						Total Designed (Watts)	Adjustments PAF Control Credits §140.6(a)(2)(-)				
(See Table I)	(See Table I)	(See Table J)	(See Table K)						(See Table F)	(See Table P)				
Conditioned:	78.4						<b>78.4</b>	≥	104.7	31.41		<b>73.29</b>		<b>COMPLIES</b>
Unconditioned:								≥						

Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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Project Name: La Mirada High School New Football Stadium - BUILDING X

Project Address: 13520 Adelfa Dr.

California Energy Commission

NRCC-LTIE

Report Page: 4 of 6

Date Prepared: 2020-02-25

J. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This Section Does Not Apply

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This Section Does Not Apply

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This Section Does Not Apply

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This Section Does Not Apply

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS

This Section Does Not Apply

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This Section Does Not Apply

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

Table Instructions: Please complete the table for all areas indicated in Table I or Table K as using a PAF credit described in §140.6(a)(2)

ELECTRICAL ROOM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BE	34.9	3	104.7	\$1.41
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<sup>1</sup> FOOTNOTES: PAFs outlined in Table 140.6-A include 1) Daylight dimming plus OFF; 2A) Occupant sensors in offices < 125 ft<sup>2</sup>; 2B) Occupant sensors in offices from 126 - 250 ft<sup>2</sup>; 2C) Occupant sensors in offices from 251 - 500 ft<sup>2</sup>; 3A) Institutional tuning, non-daylit areas; 3B) Institutional tuning, daylit areas; 4) Demand response; 5) Clerestory fenestration; 6) Horizontal slots; 7) Light shelves.

<sup>2</sup> Luminaires that qualify for PAF 5, 6, or 7 can be used in conjunction with PAF 1.

Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS

This Section Does Not Apply

R. 80% LIGHTING POWER FOR ALTERATIONS - CONTROLS EXCEPTIONS

This Section Does Not Apply

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

November 2019

### Indoor Lighting

NRCC-LTI-4 (Created 11/19)

**CERTIFICATE OF COMPLIANCE**

Project Name: La Mirada High School New Football Stadium - BUILDING X

Project Address: 13520 Adelfa Dr.

CALIFORNIA ENERGY COMMISSION

NRCC-LTI-4

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Controls Compliance (See Table H for Details)

COMPLIES with Exceptional Conditions

Rated Power Reduction Compliance (See Table Q for Details)

Not Applicable

**D. EXCEPTIONAL CONDITIONS**

*This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.*

Table H Indoor Lighting Controls Permit Applicant Notes:  
ELECTRICAL ROOM: ELECTRICAL ROOMS DO NOT REQUIRE MULTI-LEVEL AND SHUT-OFF CONTROLS

**E. ADDITIONAL REMARKS**

*This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.*

**F. INDOOR LIGHTING FIXTURE SCHEDULE**

*Table instructions: Include all permanent designed lighting and all portable lighting in offices.*

**Designated Wattage: Conditioned Spaces**

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change <sup>1</sup>	Watts per luminaire <sup>2</sup>	How Wattage is determined	Total number luminaires	Exempt per §140.6(a)(3)	Design Watts	Field Inspector Pass Fail
BE	LED LINEAR FIXTURE	<input type="checkbox"/>	<input type="checkbox"/>	34.9	Mr. Spec <sup>2</sup>	3	<input type="checkbox"/>	104.7	<input type="checkbox"/> <input type="checkbox"/>
<b>Total Designated Watts CONDITIONED SPACES:</b>								<b>104.7</b>	

<sup>1</sup> FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)(4B) is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.

<sup>2</sup> Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not the lamp.

**G. MODULAR LIGHTING SYSTEMS**

*This Section Does Not Apply*

**H. INDOOR LIGHTING CONTROLS (Not Including PAFs)**

*This Section Does Not Apply*

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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### Indoor Lighting

NRCC-LTI-4 (Created 11/19)

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Project Name: La Mirada High School New Football Stadium - BUILDING X

Project Address: 13520 Adelfa Dr.

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S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

COMPLIES with Exceptional Conditions

*This Section Does Not Apply*

**T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

*Table instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E, Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCCI/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCCI/)*

YES	NO	Form/Title	Field Inspector Pass Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTI-01-E - Must be submitted for all buildings	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-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.	<input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCC-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCC-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	<input type="checkbox"/> <input type="checkbox"/>

**U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

*Table instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E, Additional Remarks. These documents must be provided to the building inspector during construction and any with "A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>*

YES	NO	Form/Title	Field Inspector Pass Fail
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	<input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).	<input type="checkbox"/> <input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

November 2019

<b>CA STATE OF CALIFORNIA</b>		<b>CERTIFICATE OF COMPLIANCE</b> NRCC-LT-E (revised 11/19)		<b>CALIFORNIA ENERGY COMMISSION</b> 	
<b>Indoor Lighting</b>				<b>NRCC-LT-E</b>	
Project Name: La Mirada High School New Football Stadium - BUILDING X		Report Page: \$130.1(a)		Page 3 of 6	
Project Address: 13520 Adelfa Dr.		Date Prepared:		2020-02-25	

Table Instructions: Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a \* is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

Building Level Controls		01		02		03	
		Mandatory Demand Response \$130.1(b)		Shut-Off Controls \$130.1(c)		Field Inspector	
		Not Required ≤ 10,000 SF		See Area/Space Level Controls		Pass    Fail	
						<input type="checkbox"/> <input type="checkbox"/>	

Area Level Controls		04	05	06	07	08	09	10	11	12
Area Description	Complete Building or Area Category Primary Function Area	Area Controls \$130.1(a)	Multi-Level Controls \$130.1(b)	Shut-Off Controls \$130.1(c)	Primary/Skylight Daylighting \$130.1(d)	Secondary Daylighting \$140.6(d)	Interlocked Systems \$140.6(a)(1)	Field Inspector	Pass	Fail
ELECTRICAL ROOM	Electrical, Mechanical, Telephone Rooms	Manual ON/OFF	Exempt*	Exempt*	NA	NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*NOTES: Controls with a \* require a note in the space below explaining how compliance is achieved.  
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting;  
EXCEPTION 1 to §130.1(d)(2)

ELECTRICAL ROOMS DO NOT REQUIRE MULTI-LEVEL AND SHUT-OFF CONTROLS	
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LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS	
<small>Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(e) are being used.</small>	
Conditioned Spaces	Additional Allowances / Adjustment
01	02
Area Description	Complete Building or Area Category Primary Function Area
03	04
Allowed Density (W/ft²)	Area (ft²)
05	06
Allowed Watts (Watts)	Area Category    PAF
ELECTRICAL ROOM	Electrical, Mechanical, Telephone Rooms
0.4	196    78.4
TOTAL:	196    78.4

See Tables J or P for detail

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CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

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<b>CA STATE OF CALIFORNIA</b>		<b>CERTIFICATE OF COMPLIANCE</b> NRCC-LT-E (revised 11/19)		<b>CALIFORNIA ENERGY COMMISSION</b> 	
<b>Indoor Lighting</b>				<b>NRCC-LT-E</b>	
Project Name: La Mirada High School New Football Stadium - BUILDING X		Report Page: 2020-02-25		Page 6 of 6	
Project Address: 13520 Adelfa Dr.		Date Prepared:		2020-02-25	

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

I certify that this Certificate of Compliance documentation is accurate and complete

Documentation Author Name: ANTONIO ROQUE	Documentation Author Signature:
Company: TURPIN & RATTAN ENGINEERING INC.	Signature Date: 2020-02-25
Address: 2441 HONOLULU AVE. SUITE 200	CEA/HERS Certification Identification (if applicable):
City/State/Zip: MONTROSE, CA 91020	Phone: 818-249-0444

**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 Compliance is true and correct.
- 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)
- 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.
- 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.
- 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: ANTONIO ROQUE	Responsible Designer Signature:
Company: TURPIN & RATTAN ENGINEERING INC.	Date Signed: 2020-02-25
Address: 2441 HONOLULU AVE. SUITE 200	License: E14542
City/State/Zip: MONTROSE, CA 91020	Phone: 818-249-0444