CEC-NRCC-LTI-04-E (Revised 08/15) CERTIFICATE OF COMPLIANCE

Indoor Lighting – Tailored Method

CALIFORNIA ENERGY COMMISSION

NRCC-LTI-04-E (Page 1 of 7)

Date Prepared:

Project Name:

Complete separate documents for C	Conditioned and Unconditioned	Spaces.
This page is used to document:	CONDITIONED SPACES	UNCONDITIONED SPACES

A. TAILORED METHOD LIGHTING POWER ALLOWANCE SUMMARY									
1. General lighting power (Building Total from Section B of NRCC-LTI-04-E)									
2. General lighting power special function areas (Building Total from Section C of NRCC-LTI-04-E)									
3. Additional "use it or	lose	e it" lighting power (Watts	liste	ed in each of these cells sha	ill be	identical to total allowed			
watts determined in Se	ectio	n D of NRCC-LTI-04-E. Th	ese a	are auto filled depending or	n val	ues in Section D.			
Wall Display		Combined Floor		Combined Ornamental		Very Valuable			
from Section D-1		Display and Task		and Special		Merchandise			
		Lighting		Effects Lighting		from Section D-4			
		from Section D-2		from Section D-3					
	+		+		+		=	3.	
4. Total Allowed Watts using Tailored Method (add lines 1, 2 and 3)								4.	

B. TAILORED METHOD ALLOWED GENERAL LIGHTING POWER FROM TABLE 140.6-D								
A	В	C	D	E	F	G		
ROOM NUMBER	PRIMARY FUNCTION AREA	ILLUMINANCE VALUE (LUX)	ROOM CAVITY RATIO	ALLOWED LPD	FLOOR AREA	ALLOWED WATTS (E x F)		

## C. TAILORED METHOD ALLOWED GENERAL LIGHTING POWER FOR SPECIAL FUNCTION AREAS ACCORDING TO § 140.6(c)3H

This section shall be used to determine allowed general lighting power **ONLY** for the following primary function areas: Exercise Center, Gymnasium; Medical and Clinical Care; Police Stations and Fire Stations; Public rest areas along state and federal roadways; other primary function areas that are not listed in Table 140.6-D

A	В	С	D	E	F	G
ROOM NUMBER	PRIMARY FUNCTION AREA	ILLUMINANCE VALUE (LUX)	ROOM CAVITY RATIO	ALLOWED LPD	FLOOR AREA	ALLOWED WATTS (ExF)
					PAGE TOTAL	
		If	multiple pages a OR if one page	re used, enter buil e is used, enter PAC	ding total here GE TOTAL here	

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## D. TAILORED METHOD ADDITIONAL "USE IT OR LOSE IT" LIGHTING POWER ALLOWANCES

Use this section to document and calculate additional lighting power for wall display, floor display, task, ornamental, special effects, or very valuable display case lighting.
The additional lighting power allowance shall be the smaller of the allowed lighting power or the actual lighting power used.

These additional lighting power allowances shall not be available when using §140.6(c)3H to determine the general lighting power allowance, when using the Complete

Building Method, or for any areas using the Area Category Method.

## D-1. ADDITIONAL ALLOWED LIGHTING POWER FOR WALL DISPLAY LIGHTING

□ Floor displays shall not qualify for the wall display lighting power allowance.

□ Qualifying wall lighting complies with the applicable requirements in §140.6(c)31.

А	В	С	D	E	F	G	Н	I	J	К
	AL	LOTTED WATTS			DESIGN WATTS					
	Wall Display	Wall Display	Allotted							
Primary Function	Length in	Power	Watts			Mounting	Watts per		Design Watts	Allowed Watts
Area	(Linear Feet)	(W/lin foot)	(B x C)	Luminaire Code	Mounting Height	height factor	luminaire	# luminaires	(G x H x I)	(smaller of D or J)
					< 12 feet	1.00				
					12 feet to < 16 feet	0.87				
					16 feet or higher	0.77				
						Total fo	or this Primary	Function Area:		
					< 12 feet	1.00				
					12 feet to < 16 feet	0.87				
					16 feet or higher	0.77				
						Total fo	or this Primary	Function Area:		
					< 12 feet	1.00				
					12 feet to < 16 feet	0.87				
					16 feet or higher	0.77				
						Total fo	or this Primary	Function Area:		
					< 12 feet	1.00				
					12 feet to < 16 feet	0.87				
					16 feet or higher	0.77				
						Total fo	or this Primary	Function Area:		
					Sum	total power fo	r wall display li	ighting for all fu	unction areas: .	



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### D-2. Additional allowed lighting power for combined floor display and task lighting

- Displays that are installed against a wall shall not qualify for the floor display lighting power allowances.
- Lighting internal to display cases shall be counted EITHER as floor display lighting in accordance with §140.6(c)3J; or as very valuable display case lighting in accordance with §140.6(c)3Liii and iv.
- Additional allowed power for floor display lighting, and additional allowed power for task lighting, may be used by qualifying floor display lighting systems, qualifying task lighting systems, or a combination of both. For floor areas qualifying for both floor display and task lighting power allowances, the additional allowed power shall be used only once for the same floor area, so that the allowance shall not be additive.
- $\Box$  Qualifying floor display lighting complies with the applicable provision in §140.6(c)3J(v and vi).
- Additional allowed power for a combination of floor display lighting and task lighting shall be available only for (I) floors having floor displays; or (II) floors not having floor displays but having tasks having illuminance recommendations that appear in the Tenth Edition of the IES Lighting Handbook and that are higher than the general lighting level in column 2 of TABLE 140.6-D. The square footage of floor display or the square footage of task areas shall be determined in accordance with §140.6(c)3C and D, except that any floor area designed to not have floor displays or tasks, such as floor areas designated as a path of egress, shall not be included for the floor display allowance.

Α	В	С	D	E	F	G	н	I	J	к
	Al	LOTTED WATTS				DESIGN WATTS				
			Allotted							
Primary Function	Square feet of	Lighting Power	Watts			Mounting	Watts per		Design Watts	Allowed Watts
Area	area	(W per sq ft)	(B x C)	Luminaire Code	Mounting Height	height factor	luminaire	# luminaires	(G x H x I)	(smaller of D or J)
					< 12 feet	1.00				
					12 feet to < 16 feet	0.87				
					16 feet or higher	0.77				
						Total fo	or this Primary	Function Area:		
					< 12 feet	1.00				
					12 feet to < 16 feet	0.87				
					16 feet or higher	0.77				
						Total fo	or this Primary	Function Area:		
					< 12 feet	1.00				
					12 feet to < 16 feet	0.87				
					16 feet or higher	0.77				
						Total fo	or this Primary	Function Area:		
	•			•	S	Sum total powe	r for combined	floor display a	nd task lighting:	



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## D-3. Additional allowed lighting power for combined ornamental and special effects

Qualifying ornamental lighting includes luminaires such as chandeliers, sconces, lanterns, neon and cold cathode, light emitting diodes, theatrical projectors, moving lights, and light color panels when any of those lights are used in a decorative manner that does not serve as display lighting or general lighting.

□ Special effects lighting is defined as lighting installed to give off luminance instead of providing illuminance.

 $\hfill\square$  There is no mounting height multiplier for ornamental or special effects lighting

Additional allowed power for ornamental and special effects lighting may be used only for qualifying lighting systems. For floor areas qualifying for both ornamental and special effects lighting power allowances, the additional allowed power shall be used only once for the same floor area, so that the allowance shall not be additive.

А	В	С	D	E	F	G	Н	I
	AL	LOTTED WATTS		DESIGN WAT				
			Allotted					Allowed Watts
Primary Function	Square feet of	Lighting Power	Watts	Luminaire Code or Description	Watts per		Design Watts	(smaller of D or Total
Area	area	(W per sq ft)	(B x C)	(rows below accommodate 3 layers per function area)	luminaire	# luminaires	(F X G)	for H)
				1.				
				2.				
				3.				
				Total ornamental/special effects lighting for	or this primary	function area:		
				1.				
				2.				
				3.				
				Total ornamental/special effects lighting for	or this primary	function area:		
				1.				
				2.				
				3.				
				Total ornamental/special effects lighting for	or this primary	function area:		
				1.				
				2.				
				3.				
				Total ornamental/special effects lighting for	or this primary	function area:		
		•		Sum total allowed watt	ts for ornamen	tal and special	effects lighting:	



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### D-4. Additional allowed lighting power for very valuable display case lighting

- Lighting internal to display cases shall be counted EITHER as floor display lighting in accordance with §140.6(c)3J; or if qualifying, as very valuable display case lighting in accordance with §140.6(c)3Jiii and iv.
- Case lighting is lighting of small art objects, artifacts, or valuable collections which involves customer inspection of very fine detail from outside of a glass enclosed display case.
- To qualify for this allowance, case shall contain jewelry, coins, fine china, fine crystal, precious stones, silver, smart art objects or artifacts, and/or valuable collections the display of which involves customer inspection of very fine detail from outside of a locked case.
- □ This allowance is available only for display cases in retail merchandise sales, museum, and religious worship areas.
- □ Any floor area designed to not have very valuable display case lighting shall not be included for this allowance.
- □ A mounting height multiplier is not available.

Α	В	С	D	Е	F	G	н	I	J
		WATTS PER SQ	UARE FOOT OF	QUALIFYING	WATTS PER	SQUARE FOOT O	FQUALIFYING		
			FLOOR AREA		C	DISPLAY CASE ARI	EA		ALLOWED
			Allowed	Allotted			Allotted	ACTUAL	WATTS IS
		Square feet of	Watts per sq	Watts	Square feet of	Allowed Watts	Watts	INSTALLED	SMALLEST OF
Primary Function Area	Description of display case	floor area	ft	(C x D)	display case	per square foot	(F x G)	WATTS	E, H, or I
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
			0.8			12.0			
	•	-			Sum total allo	wed watts for ver	ry valuable display	case lighting:	

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ROOM CAVITY RATIO (R	CR) WORKSHEET				
RECTANGULAR SPACES					
А	В	С	D	E	F
Room Number	Task/Activity Description	Room Length (L) (ft)	Room Width (W) (ft)	Room Cavity Height (H) (ft)	RCR 5 x H x (L+W) / (L x W)
ION-RECTANGULAR SPACES	_				-
A	В	C	D	E	F
Room Number	Task/Activity Description	Room Area (A) (ft <sup>2</sup> )	Room Perimeter (P) (ft)	Room Cavity Height (H) (ft)	RCR 2.5 x H x P <b>/</b> A

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Date P

repared:		

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT						
1. I certify that this Certificate of Compliance documentation is accur	ate 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 St	ate of California:					
1. 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).						
	design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of					
	n this Certificate of Compliance are consistent with the information calculations, plans and specifications submitted to the enforcement					
	npliance shall be made available with the building permit(s) issued for					
	applicable inspections. I understand that a completed signed copy of ocumentation the builder provides to the building owner at occupancy.					
Responsible Designer Name:	Responsible Designer Signature:					
Company :	Date Signed:					
Address:	License:					
City/State/Zip:	Phone:					