

LIGHTING - GENERAL

Exceptions

Discussion of qualifying exceptions in instructions section.

Plans/Specs

Show compliance by including a drawing sheet, detail number, and/or specification section and subparagraph.

1. Interior Exceptions (Section 1313.1)

- No Interior Lighting.** The building plans and specifications do not call for new or altered interior lighting. Skip to item 5, Exterior building Lighting - General, below.

- Exceptions.** 1. The building or part of the building qualifies for an exception from code lighting requirements. Applicable code exception is number:

2. Lighting equipment that qualifies for an exception - in addition to general lighting and is separately controlled. Applicable code exception is number:

Areas of the building and equipment that qualify for any exceptions:

2. Local Shut-off controls (Section 1313.3.1.1)

- Complies.** At least one local shut-off lighting control for every 2,000 square feet of lighted floor area and for all spaces enclosed by walls or ceiling height partitions.

This control is detailed in the building plans on drawing number:

- Exception.** The building or part of the building qualifies for an exception. Applicable code exception is Section 1313.3.1.1, Exception:

Portions of the building that qualify:

3. Automatic Shutoff Controls (Section 1313.3.1.2)

- Not Applicable.** Office floor area is not over 2,000 square feet of contiguous office floor area or permitted space is not over 5,000 square feet. No offices less than 300 square feet, meeting or conference rooms, or school classrooms.

- Complies.** All interior lighting systems are equipped with a separate automatic control to shut off lighting during unoccupied periods. Offices less than 300 square feet, meeting and conference rooms, and school classrooms are equipped with occupancy sensors that comply with Section 1313.3.1.2.1.

Compliance details in plans/specs:

- Exception.** The building or part of the building qualifies for an exception.

Applicable code exception is Section 1313.3.1.2, Exception:

Portions of the building that qualify:

4. Daylighting Controls (1313.3.1.3)

- No classrooms or atriums with skylights or window to wall ratio greater than 50%.**

- Complies.** All classrooms and atriums with window to wall ratio greater than 50% and/or skylights are equipped with automatic daylight sensing controls, as required by Section 1313.3.1.3.1 and Section 1313.3.1.3.2. The daylight sensors specified comply with Section 1313.3.1.3.3.

Compliance details in plans/specs:

5. Exterior Lighting (Section 1313.5)

- Complies.** The plans do not call for use of incandescent or mercury vapor lamps for use on building exterior.

- Exception.** The building plans indicate luminaires with incandescent or mercury vapor lamps, but are specified for use in or around swimming pools, water features, or other locations subject to requirements of Article 680 of the 2002 National Electrical Code.

6. Exterior and Canopy Lighting Controls (Section 1313.3.2)

- Complies.** The building plans and specifications include photoelectric and/or clock switches on all exterior lighting systems which are designed and programmed to extinguish lights when daylight is present, as required by Section 1313.3.2.

7. Connected Lighting Power (Section 1313.4)

- Complies.** The lighting power does not exceed the power allowance established in either the Tenant Space Method (Form 5b) or the Space-by-Space Method (Form 5c).

Tenant Space Method (Form 5b)

Space-by-Space Method (Form 5c)

Exterior Building Lighting

is lighting directed to illuminate the exterior of the building and adjacent walkways and loading areas with or without canopies.

Clock Switches

shall be astronomical (seasonal correcting) type with separate programs for each day of the week and shall store energy to maintain timekeeping during power outages.



INTERIOR LIGHTING POWER - Tenant Space Method

	(a)	(b)	(c)	(d)
Lighting Budget	Tenant or Building Type (Table-13G)	Floor Area (sq ft)	Max Power Density (W/ft ²)	Lighting Power Budget (W)
Occupancy/ Use Types	See instructions for description of occupancy types			
Lighting Power Budget	1. Total Interior Lighting Power Budget (Watts) for Building.			
Track Lighting Power	2. Total length of track lighting (ft)			-
	3. Line 2 multiplied by 50 Watts/ft			
	4. Total amperage of circuit breaker(s) serving track lighting (amps)			
	5. Voltage of circuit breaker serving track lighting (volts)			
	6. Maximum wattage of track lighting (multiply line 4 by line 5)			
	7. VA rating of the inline current limiter or the low voltage transformers			
	8. Track Lighting Power (the lesser value of line 3, 6 or 7)			
Building's Interior Lighting Power	9. Total Interior Lighting Power from Worksheet 5b-1 (Sum of Column (m))			+
	10. Total Adjusted Interior Lighting Power (line 8 + line 9)			=
	11. Does Interior Lighting Design Meet Budget? Line 10 must be no greater than line 1.			
Exterior Canopy Parking Garage Lighting Power	12. Do Exterior Canopies Meet Budget (Worksheets 5c)?			
	13. Does Parking Garage Meet Budget (Worksheets 5c)?			



INTERIOR LIGHTING POWER - Space-by-Space Method

Lighting Power Budget

1. Total Interior Lighting Power Budget from Worksheet 5b-1 (Sum of Column (I))	
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Track Lighting Power

2. Total length of track lighting (ft)	
3. Line 2 multiplied by 50 Watts/ft	
4. Total amperage of circuit breaker(s) serving track lighting (amps)	
5. Voltage of circuit breaker serving track lighting (volts)	
6. Maximum wattage of track lighting (multiply line 4 by line 5)	
7. VA rating of the inline current limiter or the low voltage transformers	
8. Track Lighting Power (the lesser value of line 3, 6 or 7)	

Building's Interior Lighting Power

9. Total Interior Lighting Power from Worksheet 5b-1 (Sum of Column (m))	+	
10. Total Adjusted Lighting Power (line 8 + line 9)	=	
11. Does Interior Lighting Design Meet Budget? Line 10 must be no greater than line 1.		

Exterior Canopy Parking Garage Lighting Power

12. Do Exterior Canopies Meet Budget (Worksheets 5c)?	
13. Does Parking Garage Meet Budget (Worksheets 5c)?	

Retail Display Lighting Power

14. Does Each Space With Retail Display Lighting Meet Budget (Worksheets 5d)?	
15. Is The Total Retail Display Lighting Additional Power Less Than 17,500 W (sum of line 9 on Worksheets 5d)?	
16. Does Retail Display Lighting Meet Budget?	



INTERIOR LIGHTING POWER

Each room must be identified. Describe luminaires for each individual room in plans.

For track lighting enter lineal feet in column column (g).

Column (k), enter sum of column (j) for each room only once at first entry for the room. See example in instructions.

(a) Room ID (do not leave any blanks)	Space-by-Space Method Only Skip to column (f) if using the Tenant Space Method					(f) Lum ID from Worksheet 5a Column (a)	(g) Quantity of Luminaires (or lineal ft. for track lighting)	(h) Luminaire Power (Watts)	(i) Exempt Fixtures	(j) Lighting Power (g) x (h)	(k) Room Total Ltg. Power
	(b) Area (ft ²)	(c) Space Type (Table 13-H) (enter space type only once per room)	(d) Space Type LPD	(e) Lighting Power Budget (b) x (d)							
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Wksh 5b- Total Sq Ft	Worksheet 5b-____ Total Budget					Wksh 5b-____ Total Lighting Power (excluding exempt/track fixtures)					

Other Pages
List additional worksheets necessary to catalog all luminaires in building

Total Number of Additional Worksheet 5b -----



WORKSHEET NUMBER Complete this section when more than one Worksheet 3b is completed	(l) Lighting Power Budget: Space-by-Space only (Total of column (e))	(m) Proposed Building Lighting Power (Total of column (k), excluding exempt/track)	(n) Area Sqft. (not required for Tenant Method)
5b-1			
5b-2			
5b-3			
Sum of additional 5b worksheets			
Total Budget (of all worksheets)			

EXTERIOR CANOPY AND PARKING GARAGE LIGHTING POWER

Exterior Canopy Lighting

(a) Room ID (do not leave any blanks)	(b) Area (ft ²)	(c) Canopy	(d) Space Type LPD	(e) Lighting Power Budget (b) x (d)	(f) Lum ID from Worksheet 5a Column (a)	(g) Quantity of Luminaires (or lineal ft. for track lighting)	(h) Luminaire Power (Watts)	(i) Exempt Fixtures	(j) Lighting Power (g) x (h)	(k) Room Total Ltg. Power
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Total Exterior Canopy Budget					Total Exterior Canopy Lighting Power (excluding exempt fixtures)					

Each room must be identified.
Describe luminaires for each individual room in plans.
For track lighting enter lineal feet in column column (g).
Column (k), enter sum of column (j) for each room only once at first entry for the room. See example in instructions.

Parking Garage Lighting

(a) Room ID (do not leave any blanks)	(b) Area (ft ²)	(c) Parking Garage	(d) Space Type LPD	(e) Lighting Power Budget (b) x (d)	(f) Lum ID from Worksheet 5a Column (a)	(g) Quantity of Luminaires (or lineal ft. for track lighting)	(h) Luminaire Power (Watts)	(i) Exempt Fixtures	(j) Lighting Power (g) x (h)	(k) Room Total Ltg. Power
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Total Parking Garage Budget					Total Parking Garage Lighting Power (excluding exempt fixtures)					

Does Canopy Lighting Power Comply?	
Does Parking Garage Lighting Power Comply?	



Retail Display Lighting Power

Complete one worksheet for each room (space) for retail display lighting that is specifically directed to highlight merchandise, and is controlled separately from the general lighting system within the room. General lighting should be included on Worksheet 5b.

1. Room # or Space ID	
2. Room Area (ft²)	
3. Retail Space Type	

Describe luminaires for each individual room in plans.

For track lighting enter lineal feet in column (b).

(a) Lum ID from Worksheet 5a Column (a)	(b) Quantity of Luminaires (or lineal ft. for track lighting)	(c) Luminaire Power (Watts)	(d) Lighting Power (b) x (c)

1.	Space Display Lighting Power (total d column excluding track fixtures)	
2.	Total length of track lighting (ft)	
3.	Line 2 multiplied by 50 Watts/ft	
4.	Total amperage of circuit breaker(s) serving track lighting (amps)	
5.	Voltage of circuit breaker serving track lighting (volts)	
6.	Maximum wattage of track lighting (multiply line 4 by line 5)	
7.	VA rating of the inline current limiter or the low voltage transformers	
8.	Track Lighting Power (the lesser value of line 3, 6 or 7)	
9.	Total Space Display Lighting Power (Watts) (line 1 + line 8)	
10.	Total Space Display Lighting Power Budget (Watts) (room area x 1.75 to max of 17,500)	
11.	Does Space Retail Display Meet Space Budget (Line 9 less than line 10 and less than 17,500 W)?	

Total Number of Additional Worksheet 5d