

What is the allowed lighting power under the area category method?

Answer

Space	LPD	Area	Allowed Watts
A) Main Entry	1.5 W/ft ²	500 ft ²	750
B) Corridors and Restrooms	0.6 W/ft ²	2,000 ft ²	1,200
C) Grocery Sales	1.6 W/ft ²	3,000 ft ²	4,800
D) Retail Store	1.7 W/ft ²	2,500 ft ²	4,250
TOTAL		8,000 ft ²	11,000

with 2,000 ft² for future development.

Example 5-16

Question

What is the wattage allowance for a 10 cubic foot chandelier with 5-50 W lamps in a 300 ft² bank entry lobby?

Answer

The wattage based on the task space is 1 W/ft² x 300 ft² = 300 W

The wattage based on actual design watts is 250 W.

The wattage allowance for the chandelier is the smaller of the two values, or 250 W.

Table 5-3 – Standards Table 146-C Area Category Method - Lighting Power Density Values (Watts/ft²)

PRIMARY FUNCTION	ALLOWED LIGHTING POWER
Auditorium	1.5*
Auto repair	1.1 **
Classrooms, lecture, training, vocational room	1.2
Civic Meeting Place	1.3*
Commercial and industrial storage	0.6
Convention, conference, multipurpose and meeting centers	1.4*
Corridors, restrooms, stairs and support areas	0.6
Dining	1.1*
Electrical, mechanical rooms	0.7 **
Exercise center, gymnasium	1.0
Exhibit, museum	2.0
Financial transactions	1.2*
General commercial and industrial work	
High bay	1.1**
Low bay	1.0 **
Precision	1.3 ***
Grocery sales	1.6
Housing, Public and Commons Areas	

PRIMARY FUNCTION	ALLOWED LIGHTING POWER
Multi-family	1.0
Dormitory, Senior Housing	1.5
Hotel function area	1.5*
Kitchen, food preparation	1.6
Laundry	0.9
Library	
Reading areas	1.2
Stacks	1.5
Lobbies	
Hotel lobby	1.1*
Main entry lobby	1.5*
Locker/dressing room	0.8
Lounge/recreation	1.1
Malls and atria	1.2*
Medical and clinical care	1.2
Office	1.2
Parking garage	0.4
Religious worship	1.5*
Retail merchandise sales, wholesale showrooms	1.7
Tenant lease space	1.0
Transportation function	1.2
Theaters	
Motion picture	0.9*
Performance	1.4*
Waiting area	1.1*
All other	0.6
<p>* The smallest of the following values may be added to the allowed lighting power for ornamental chandeliers and sconces that are switched or dimmed on circuits different from the circuits for general lighting:</p> <p>a. One watt per square foot times the area of the task space that the chandelier or sconce is in; or</p> <p>b. The actual design wattage of the chandelier or sconce.</p> <p>** The smallest of the following values may be added to the allowed lighting power for specialized task work.</p> <p>a. One half watt per square foot times the area of the task space required for an art, craft assembly or manufacturing operation is performed). For spaces employing this allowance, submit plans under §10-103 of Title 24, Part 1 clearly identifying all task spaces for using this task and the lighting equipment designed to illuminate them. Tasks that are performed less than two hours a day, or poor quality tasks that can be improved shall not be employed to justify use this allowance.</p> <p>b. The actual design wattage of the luminaire (s) providing illuminance to the task area(s).</p> <p>*** The smallest of the following values may be added to the allowed lighting power for precision commercial or industrial work</p> <p>a. One watt per square foot times the area of the task space required for the precision work. For spaces employing this allowance, submit plans under §10-103 of Title 24, Part 1 clearly identifying all task spaces for using this task and the lighting equipment designed to illuminate them. Tasks that are performed less than two hours a day, or poor quality tasks that can be improved shall not be employed to justify use this allowance.</p> <p>b. The actual design wattage of the luminaire (s) providing illuminance to the task area(s)</p>	