

TABLE 401.3.2a
Interior Lighting Power Allowance, W/ft²

Building Space Activity ^{a, b}	Gross Lighted Area of Total Building					
	0 to 2,000 ft ²	2,001 to 10,000 ft ²	10,001 to 25,000 ft ²	25,001 to 50,000 ft ²	50,001 to 250,000 ft ²	>250,000 ft ²
Food Service:						
Fast Food/Cafeteria	1.50 <u>1.40</u>	1.38 <u>1.28</u>	1.34 <u>1.24</u>	1.32 <u>1.22</u>	1.31 <u>1.21</u>	1.30 <u>1.20</u>
Leisure Dining/Bar	2.20 <u>1.60</u>	1.91 <u>1.56</u>	1.71 <u>1.52</u>	1.56 <u>1.48</u>	1.46 <u>1.44</u>	1.40 <u>1.40</u>
Offices	1.90 <u>1.50</u>	1.81 <u>1.44</u>	1.72 <u>1.37</u>	1.65 <u>1.32</u>	1.57 <u>1.26</u>	1.50 <u>1.21</u>
Retail ^c	3.30 <u>2.70</u>	3.08 <u>2.52</u>	2.83 <u>2.32</u>	2.50 <u>2.05</u>	2.28 <u>1.87</u>	2.10 <u>1.72</u>
Mall Concourse						
Multi-store Service	1.60 <u>0.69</u>	1.58 <u>0.68</u>	1.52 <u>0.65</u>	1.46 <u>0.63</u>	1.43 <u>0.61</u>	1.40 <u>0.60</u>
Service Establishment	2.70 <u>2.31</u>	2.37 <u>2.03</u>	2.08 <u>1.78</u>	1.92 <u>1.65</u>	1.80 <u>1.54</u>	1.70 <u>1.46</u>
Garages	0.30	0.28	0.24	0.22	0.21	0.20
Schools:						
Preschool/Elementary	1.80 <u>1.33</u>	1.80 <u>1.33</u>	1.72 <u>1.27</u>	1.65 <u>1.22</u>	1.57 <u>1.16</u>	1.50 <u>1.11</u>
Jr.High/High School	1.90 <u>1.40</u>	1.90 <u>1.40</u>	1.88 <u>1.39</u>	1.83 <u>1.35</u>	1.76 <u>1.30</u>	1.70 <u>1.26</u>
Technical/Vocational	2.40 <u>1.77</u>	2.33 <u>1.72</u>	2.17 <u>1.60</u>	2.01 <u>1.49</u>	1.84 <u>1.36</u>	1.70 <u>1.26</u>
Industrial/Manufacturing	2.50	2.43	2.37	2.33	2.30	2.28
Warehouse/Storage	0.80	0.66	0.56	0.48	0.43	0.40
Notes:						
^a If at least 10% of the building area is intended for multiple space activities, such as parking, retail, and storage in an office building, then calculate for each separate building type/space activity.						
^b The values in the categories are building-wide allowances which include the listed activity and directly related facilities such as conference rooms, lobbies, corridors, restrooms, etc.						
^c Includes general, merchandising, and display lighting.						

**Table 401.3.2b
Unit Interior Lighting Power Allowance**

Common Area/Activity^a	UPD W/ft²	UPD W/ft²
Auditorium ^b	1.6 ^b	
Corridor ^c	0.8	
Classroom/Lecture Hall	2.0	
Electrical/Mechanical Equipment Room		
General ^c	0.7	
Control Rooms ^c	1.5	
Food Service/Entertainment		
Fast Food/Cafeteria	1.3	
Leisure Dining ^{d,f}	2.5	<u>1.6^f</u>
Bar/Lounge	2.5	
Kitchen	1.4	
Recreation/Lounge	0.7	
Stair		
Active Traffic	0.6	
Emergency Exit	0.4	
Toilet and Washroom	0.8	
Garage		
Auto and Pedestrian Circulation Area	0.3	
Parking Area	0.2	
Laboratory	2.3	
Library		
Audiovisual	1.1	
Stack Area ^g	1.5	<u>1.1^g</u>
Card File and Cataloging	1.6	<u>1.5</u>
Reading Area	1.9	<u>1.5</u>
Lobby (General)		
Reception and Waiting	1.0	
Elevator Lobbies	0.8	
Atrium (Multi-Story)		
First 3 Floors	0.7	
Each Additional Floor	0.2	
Locker Room and Shower	0.8	
Common Area/Activity^a	UPD W/ft²	UPD W/ft²
Office Category 1		
Enclosed offices, all open-plan offices w/o partitions or w/partitions* lower than 4.5 feet below the ceiling.		
Reading, typing, filing	1.8	<u>1.5</u>
Drafting	2.6	<u>1.9</u>
Accounting	2.1	1.6
Office Category 2		
Open-plan offices 900 ft ² or larger w/partitions* 3.5 to 4.5 ft below the ceiling. Offices less than 900 ft ² shall use category 1 ^c .		
Reading, typing, filing	1.9	<u>1.5</u>
Drafting	2.9	<u>2.0</u>
Accounting	2.4	1.8
Office Category 3		
Open-plan offices 900 ft ² or larger w/ partitions* higher than 3.5 ft below the ceiling. Offices less than 900 ft ² shall use category 1 ^c .		

Table 401.3.2b (continued)
Unit Interior Lighting Power Allowance

Reading, typing, filing	<u>2.2</u>	<u>1.7</u>	
Drafting	<u>3.4</u>		<u>2.3</u>
Accounting	<u>2.7</u>		<u>1.9</u>
Common Activity Areas			
Conference /Meeting Room ^b	<u>1.8</u>		<u>1.3^b</u>
Computer/Office Equipment ^g	<u>2.1</u>		<u>1.1^g</u>
Filing, Inactive ^g	<u>1.0^g</u>		
Mail Room			<u>1.8</u>
Shop (Non-industrial)			
Machinery			<u>2.5</u>
Electrical/Electronic			<u>2.5</u>
Painting			<u>1.6</u>
Carpentry			<u>2.3</u>
Welding			<u>1.2</u>
Industrial			
General			<u>2.5</u>
Inspection			<u>3.0</u>
Storage and Warehouse			
Inactive Storage ^g		<u>0.3</u>	<u>0.4^g</u>
Active Storage, Bulky		<u>0.3</u>	<u>0.6</u>
Active Storage, Fine		<u>1.0</u>	
Material Handling		<u>1.0</u>	
Unlisted Space			<u>0.2</u>

^aNot less than 90% of all workstations shall be individually enclosed with partitions of at least the height described.

^aUse a weighted average UPD in rooms with multiple simultaneous activities, weighted in proportion to the area served.

^bA 1.5 power adjustment factor is applicable for multi-function spaces when a supplementary system having independent controls is installed that has installed power \leq 33% of the adjusted lighting power for that space.

^c~~Area factor of 1.0 shall be used for these spaces.~~

^dUPD includes lighting power required for clean-up purposes.

~~Area factor shall not exceed 1.55~~

^fUPD can be increased by 50% if at least 75% of connected lighting load is on dimmers.

^gUPD can be increased by 50% if at least 75% of connected lighting load for that area is on occupancy sensors or time switch.

**Table 401.3.2c
Unit Interior Lighting Power Allowance**

Specific Building Area/Activity^a	UPD W/ft²	UPD W/ft²
Airport, Bus and Rail Station		
Baggage Area	1.0	<u>0.8</u>
Concourse/Mail Throughway	0.9	
Ticket Counter	2.5	<u>2.0</u>
Waiting and Lounge Area	1.2	
Bank		
Customer Area	1.1	
Banking Activity Area	2.8	2.2
Barber and Beauty Parlor	2.0	1.6
Church, Synagogue, chapel		
Worship/Congregational	2.5	
Preaching and Sermon/Choir	2.7	
Dormitory		
Bedroom	1.1	<u>1.0</u>
Bedroom w/study	1.4	<u>1.3</u>
Study Hall	1.8	1.5
Fire and Police Department		
Fire Engine Room	0.7	
Jail Cell	0.8	
Hospital/Nursing Home		
Corridor ^c	1.3	<u>1.3</u>
Dental Suite/Examination/Treatment	1.6	<u>2.0</u>
Emergency	2.3	
Laboratory	1.9	<u>2.2</u>
Lounge/Waiting Room	0.9	
Medical Supplies	2.4	<u>2.2</u>
Nursery	2.0	
Nurse Station	2.1	
Occupational Therapy/Physical Therapy	1.6	
Patient Room	1.4	
Pharmacy	1.7	<u>2.2</u>
Radiology	2.1	1.8
Surgical and OB Studies		
General Area	2.1	
Operating Room	7	<u>EXEMPT</u>
Recovery	2.3	
Hotel/Conference Center		
Banquet Room/Multi-purpose ^b	2.4	<u>1.7^b</u>
Bathroom/Powder Room	1.2	
Guest Room	1.4	<u>0.9</u>
Public Area	1.2	<u>1.0</u>
Exhibition Hall	2.6	<u>1.8^b</u>
Conference/Meeting ^b	1.8	<u>1.5^b</u>
Lobby	1.9	<u>1.5</u>
Reception Desk	2.4	

Table 401.3.2c (continued)
Unit Interior Lighting Power Allowance

Specific Building Area/Activity^a	UPD W/ft²	UPD W/ft²	
Laundry			
Washing	0.9		
Ironing and Sorting	1.3		
Museum and Gallery			
General Exhibition	1.9		
Inspection/Restoration	3.9	<u>3.0</u>	
Storage (Artifacts) Inactive ^b	0.6		
Storage (Artifacts) Active ^b	0.7		
Post Office			
Lobby	1.1		
Sorting and mailing	2.1		
Service Station/Auto Repair	1.0		
Theater			
Performance Arts	1.5		
Motion Picture	1.0		
Lobby	1.5		
Retail Establishments – Merchandising and Circulation Area			
<i>(Applicable to all lighting, including accent and display lighting, installed in merchandising and circulation areas)</i>			
Type 1	Jewelry merchandising, where minute examination of displayed merchandise is critical.	5.6	<u>5.6</u>
Type 2	Fine merchandising, such as fine apparel and accessories, china, crystal, and silver art galleries and where the detailed display and examination of merchandise is important.	3.2	<u>2.9</u>
Type 3	Mass merchandising, such as general apparel, variety goods, stationary, books, sporting goods, hobby materials, cameras, gifts, and luggage, displayed in warehouse type of building, where general display and examination of merchandise is adequate.	3.3	<u>2.7</u>
Type 4	General merchandising, such as general apparel, variety goods, stationary, books, sporting goods, hobby materials, cameras, gifts, and luggage, displayed in a department store type of building, where general display and examination of merchandise is adequate.	3.1	<u>2.3</u>
Type 5	Food and miscellaneous such as bakeries, hardware and houseware, grocery stores, appliance and furniture stores, where pleasant appearance is important.	2.8	<u>2.4</u>
Type 6	Service establishments, where functional performance is important.	2.7	<u>2.6</u>
Mall Concourse		1.4	
Retail Support Areas			
Tailoring		2.1	
Dressing/Fitting Rooms		1.4	

^aUse a weighted average UPD in rooms with multiple simultaneous activities, weighted in proportion to the area served.

^bA 1.5 power adjustment factor is applicable for multi-function spaces when a supplementary system having independent controls is installed that has installed power \leq 33% of the adjusted lighting power for that space.

^cArea factor of 1.0 shall be used for these spaces.

^dUPD includes lighting power required for clean-up purposes.

^eArea factor shall not exceed 1.55.

**Table 401.3.2d
Unit Interior Lighting Power Allowance**

Indoor Athletic Area/Activity^{c,f}	UPD W/ft²
Seating Area, All Sports	0.4
Badminton	
Club	0.5
Tournament	0.8
Basketball/Volleyball	
Intramural	0.8
College	1.3
Professional	1.9
Bowling	
Approach Area	0.5
Lanes	1.1
Boxing or Wrestling (platform)	
Amateur	2.4
Professional	4.8
Gymnasium	
General Exercising and Recreational Only	1.0
Handball/Racquetball/Squash	
Club	1.3
Tournament	2.6
Hockey, ice	
Amateur	1.3
College or Professional	2.6
Skating Rink	
Recreational	0.6
Exhibition or Professional	2.6
Swimming	
Recreational	0.9
Exhibition	1.5
Underwater	1.0
Tennis	
Recreational (Class III)	1.3
Club or College (Class II)	1.9
Professional (Class I)	2.6
Tennis, table	
Club	1.0
Tournament	1.6

^aUse a weighted average UPD in rooms with multiple simultaneous activities, weighted in proportion to the area served.

^bA 1.5 power adjustment factor is applicable for multi-function spaces when a supplementary system having independent controls is installed that has installed power $\leq 33\%$ of the adjusted lighting power for that space.

^c~~Area factor of 1.0 shall be used for these spaces.~~

^dUPD includes lighting power required for clean-up purpose.

^e~~Area factor shall not exceed 1.55.~~

^fConsider as 10 ft beyond playing boundaries but less than or equal to the total floor area of the sports space minus spectator seating area.