

Question

If the parking lot shown in the previous examples (with 25 ft mounting height) were in a jurisdiction that required a minimum of 2 footcandles of parking lot illumination, what would be the allowed lighting power?

Answer

Referring to Standards Table 147-C, the allowed lighting power density for 2 footcandles is 0.12 W/ft², which is lower than the 0.15 allowed for Lighting Zone 3, so no additional power would be permitted. However, if the local ordinance required an average 3 footcandles, then the maximum lighting power density would be 0.19 W/ft² and lighting power could be increased to 0.19 W/ft² x 17,400 ft² or 3,306 watts.

Adjustments For Security

*Exception 2 to 147(c)1.B.
Table 147-D*

In some situations higher lighting levels may be required because of special security requirements. Lighting power may be increased by values in Standards Table 147-D for security reasons in three cases:

- For retail parking lots in Lighting Zones 1, 2, and 3, the lighting power allowance from Standards Table 147-A may be increased by 25% (multiply the value by 1.25).
- For hardscape areas (plazas, pedestrian ways, parking, or roadways) within 100 ft of the entrance of senior housing facilities, the lighting power allowance from Standards Table 147-A may be increased by 25% (multiply the value by 1.25).
- For parking lots and walkways within 60 ft of building entrances for law enforcement, fire, ambulance and emergency vehicle facilities, the lighting power allowance from Standards Table 147-A may be doubled (multiply the value by 2.0).

When the security adjustment is used, the areas affected shall be considered special applications and no tradeoffs are permitted. The area of security lighting is dropped from the area of general site illumination and it is treated as a special use-it-or-lose-it allowance. Luminaires that are used for this special security lighting shall not create illuminated area for the purpose of determining general site illumination.

Table 6-5 – Standards Table 147-D Adjustments for Security

Function Area	Multiplier
Retail parking lots in Lighting Zones 1, 2 and 3	1.25
Hardscape areas within 100 feet of the entrance of senior housing facilities in Lighting Zones 1, 2, and 3	1.25
Parking lots and walkways within 60 feet of entrances to the building for law enforcement, fire, ambulance and emergency vehicle facilities	2.0

Example 6-19