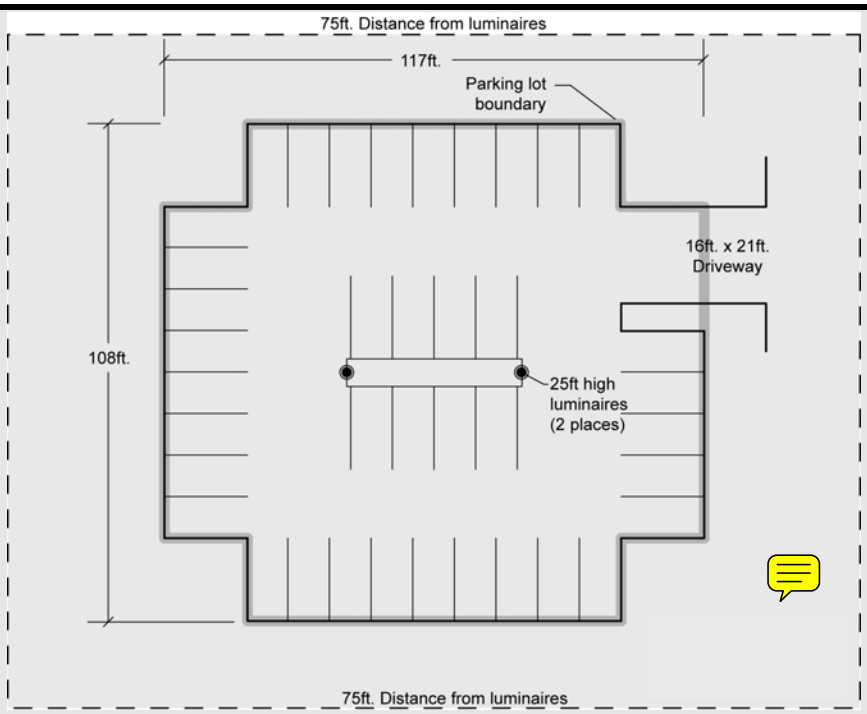

Answer

The two luminaires create a maximum illuminated area that extends 75 ft (3 x 25 ft) in all four directions. The boundary of the maximum illuminated area extends beyond the edges of the parking lot as well as the entrance drive so the entire paved area is considered illuminated. The landscaped island near the entrance is less than 10 ft wide, so it too is included as part of the illuminated area. The landscaped cutouts (15 x15 ft) in the corners of the parking lot are bound by pavement on only two sides so they are not included. The illuminated area of the parking lot is 13,986 ft² [12,636 ft² - 900 ft² (cutouts) + 2,250 ft² (5ft band). The illuminated area of the driveway is 16 ft x 21 ft or 336 ft². The total area is 14,332 ft² and the allowance for Lighting Zone 3 is 0.15 W/ft². The maximum power is therefore 2,148 watts.

Example 6-17

Question

In the parking lot layout shown above, what would the illuminated area be and what would the maximum allowed lighting power be if the two luminaires were mounted at a height of 15 feet and the two poles were placed 30 feet apart?

Answer

If the mounting height is reduced to 15 ft, then the illuminated area is 120 ft by 90 ft. The top 9 feet and bottom 9 feet of the parking lot must be excluded from the illuminated area of the parking lot.