

## Lighting at our datacenters

## **Datacenter light sources**

Microsoft datacenters include perimeter fencing and 24-hour exterior lighting to protect our employees and operations. At our datacenter properties, artificial exterior lighting is strategically placed both around the buildings, and in places such as parking lots, roadways, sidewalks, and perimeter fencing. Lighting placement and fixtures are designed in a thoughtful way, taking into consideration human safety, visual comfort and building aesthetics and identification, while being respectful of the surroundings.

## Good lighting design

Poor lighting design causes light pollution, which in common terms, means misdirection or misuse of light, generally a result of inappropriate placement, or design of exterior lighting.

Good lighting design involves the reduction of three primary forms of light pollution, using the BUG rating method.

The acronym **B.U.G** refers to three types of light pollution:



## Our datacenter lighting best practices

- 1. Exterior light fixtures have an uplight of zero, meaning the fixtures are designed to direct the light downward and prohibit ambient light pollution into the night sky.
- 2. Lighting near the perimeter does not extend past the datacenter property line if the property is adjacent to residences.
- 3. Light fixture mounting height is 28 feet, which is lower than many commercial buildings. When fixtures are mounted lower, it reduces light pollution in terms of backlight and glare.