

Lamp Types

Exterior Security Lighting

This job aid provides the characteristics and uses of different types of lamps for exterior security lighting.

Type of Lamp	Wattage Range	Initial Lumens Per Watt	Average Rated Life (Hours)	Color of Light	Color Rendition	Used for
Incandescent	15–1,500	8–24	750–3,500	Standard for daylight	Good	Exterior and interior locations where color recognition and human appearance are important
Fluorescent	4–215	14–95	6,000–20,000+	White	Good	Exterior and interior locations where color recognition and human appearance are important
Tungsten-Halogen	20–1,875	10–30	950–6,000	White	Good	Exterior and interior locations where color recognition and human appearance are important

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High-Intensity Discharge (HID) Lamp: Metal Halide	70–2,000	69–115	5,000–20,000	Closest to daylight	Good	Exterior and interior locations where color recognition and human appearance are important
HID Lamp: High-Pressure Sodium (HPS)	35–1,000	51–130	7,500–24,000+	Golden-white to yellow	Reds appear brown	Exterior locations, but do NOT use for new exterior applications; may be used under special circumstances in existing applications
HID Lamp: Mercury Vapor	n/a	n/a	n/a	n/a	n/a	Do NOT use this type of lamp.
Low-Pressure Sodium (LPS)	18–180	62–150	12,000–18,000	Yellowish	All colors appear yellow-grey	Exterior locations, but do NOT use except in unique applications such as sea turtle nesting areas

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Solid State Lighting: <ul style="list-style-type: none"> • Light emitting diodes (LEDs) • Organic light emitting diodes (OLEDs) • Polymer light emitting diodes (PLEDs) 	43-107	120	35,000-50,000	Not inherently white light sources but near monochromatic light (i.e. blue, red, yellow, etc.)	Good	Exterior and interior locations; often used in traffic lights and used frequently in modern vehicle lights, street and parking lot lights, train marker lights, building exteriors, and remote controls, etc.; more energy efficient than HID lamps
Induction Lighting	40-300	90	100,000+	White	Good	Exterior locations; energy efficient and instant on/off operation