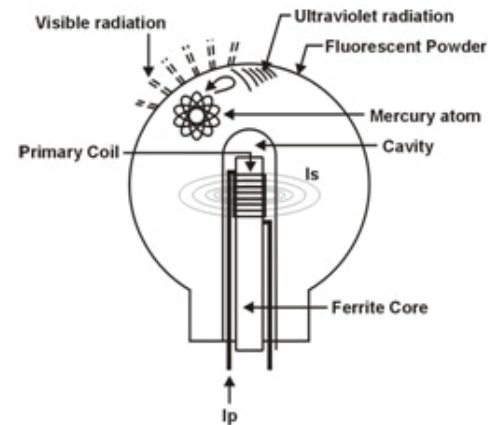


What's Electrodeless Induction Lamp?

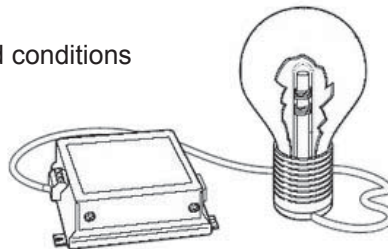
Induction lamps (or commonly known as electrodeless lamp) are high frequency (HF) light sources, which follow the same basic principles of converting electrical power into visible radiation as conventional fluorescent lamps. The fundamental difference between induction lamps and conventional fluorescent lamps is that the former operate without electrodes. The absence of the electrodes in the induction lamps enhances the lamp life. The invention of induction lighting is based on the principles of induction and light generation via a gas discharge. An alternative current through the primary coil induces an alternative magnetic field in the ferrite core or coil. The alternative magnetic field in turn induces an alternative secondary current in the secondary coil or ring (Is).



Working Principal of induction lamp

What is the Advantages of Electrodeless Lamp?

- Extremely long life
- Highly Efficient and Energy Saving
- Instant starting, no cold-start
- No flickering
- Perform well under extreme cold conditions
- Bright, white light (CRI ≥ 80)
- Improved visibility and security
- No glare and light pollution
- Green Light Source



Why Induction Lamp has such a long life?

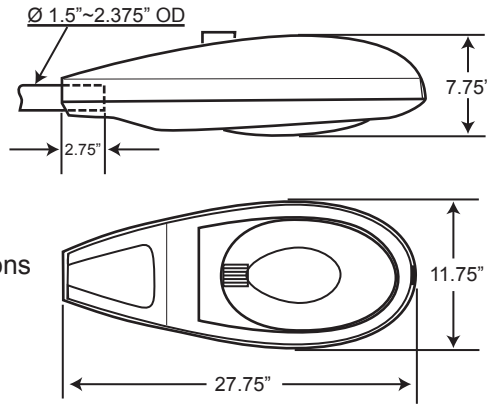
The loss of cathode emission materials, due to evaporation and sputtering caused by ion bombardment, limits the life of fluorescent lamps to between 5,000 to 15,000 hours. However, the life of some induction lamps on the market today reaches 60,000 hours. The long life time of the induction lamps allow them to be applied in cases where lamp maintenance and access are very difficult or expensive.

ECOWATT Induction Lamp v.s. other light sources

Light Source	Induction Lamp	Incandescent	Fluorescent	Mercury Vapor	High Pressure Sodium	Metal Halide
Power Range	20-165W	10-500W	1-125W	50-1,000W	70-400W	50-1,000W
Efficacy	70 lm/w	6-24 lm/w	60-100 lm/w	30-65 lm/w	50-100 lm/w	50-100 lm/w
Rated Product Life	60,000 hr	1,000 hr	5,000-15,000 hr	5,000-15,000 hr	10,000-20,000 hr	6,000-15,000 hr
CRI	88	95-99	50-80	15-40	21-55	65-80
Starting Time	< 0.5 s	Instant	1-5 s	4-8 min.	4-8 min.	4-10 min.
Re-strike Time	Instant	Instant	Instant	5-10min.	10-20 min.	10-20 min.
Power Factor	0.98	1	0.4-0.9	0.44-0.67	0.44	0.6-0.9
Flicking	No	Not obvious	Obvious	Obvious	Obvious	Obvious
Surface Temperature	< 90 °C	High	Low	High	± 300 °C	Very high
Efficacy affected by Voltage Fluctuation	Low	High	High	High	High	High
Efficacy affected by Temperature Fluctuation	Low	High	High	High	High	High
Vibration Tolerance	Excellent	Bad	Good	Good	Somewhat good	Good
Bulb Orientation	Any direction	Any direction	Directional	Vertical	Any direction	Any direction

Applications:

- ⊕ Major Roadways
- ⊕ Residential Streets
- ⊕ Pedestrian Walkways
- ⊕ Parking Lots
- ⊕ Docks and Piers
- ⊕ Remote and Rural Locations
- ⊕ High Crime Areas



Model EW-3870FX

Features:

- Die-cast aluminum housing with electrocoat paint finish
- High strength, clear, tempered glass lens
- Internal bulb changing structure, ensures good sealing property and dust prevention
- Specially designed reflector for Induction Lamp
- Universal two bolt slipfitter
- Mounting: up to 2.365 in. (60mm) pole
- Fits up to 150W induction lamp
- Induction lamp included

Cost Savings:

Save up to \$80 per year per light; \$1,200 over the product's lifetime.¹

Energy Savings:

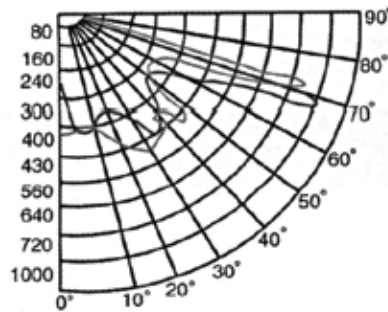
Up to 560 kilo-watt hours/year; 8,400 kilo-watt hours over the product's lifetime.

Greenhouse Gas (CO₂) Reduction:

Up to 868 lbs/yr; 13,020 lbs. over the product's lifetime - about as much CO₂ as the average passenger car produces in 8 months of driving.²

¹ Savings based on replacement of 250W High Pressure Sodium light or 250W Metal Halide with 135W Induction Lamp.

² Saving based on U.S. average 1.55 lbs CO₂ per kwh, 11,560 lbs CO₂ per passenger car per year.



Photometric

Specifications:

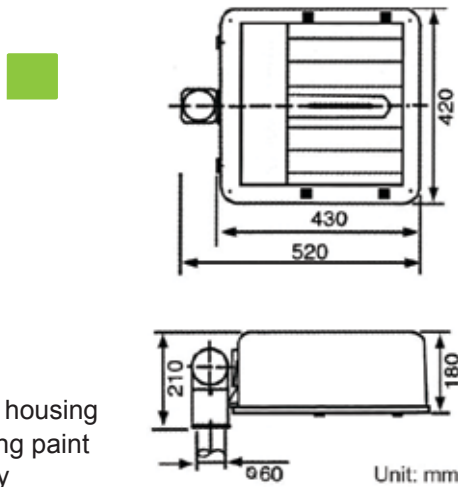
Model	35W	50W	85W	135W	150W
Radio Frequency	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz
Rated Power	35W	50W	85W	135W	150W
Current (220V)	0.16A	0.23A	0.39A	0.63A	0.70A
Power Factor	0.98	0.98	0.98	0.98	0.98
Starting Time	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s
Luminous Flux	2450 lm	3500 lm	5950 lm	9450 lm	10500 lm
CCT	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K
CRI	> 80	> 80	> 80	> 80	> 80
Rated Product Life	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.

Applications:

- ▶ Parking Lots
- ▶ Tennis courts
- ▶ Shopping centers
- ▶ Commercial and industrial complexes outdoor lighting
- ▶ Residential areas and parkway lighting
- ▶ General area lighting

Features:

- ▶ Heavy-duty die-cast aluminum housing
- ▶ High temperature static-spraying paint finish, available in black or gray
- ▶ 5mm Heat and impact resistant tempered flat glass lens
- ▶ High purity aluminum reflector specially designed for Induction Lamp
- ▶ Enclosed and gasketed optical
- ▶ 0° to 180° adjustable lighting angle
- ▶ Mounting: up to 2.365 in. (60mm) pole
- ▶ Fits up to 165W induction lamp
- ▶ Induction lamp included



Model EW-3230FX

Cost Savings:

Save up to \$80 per year per light; \$1,200 over the product's lifetime.¹

Energy Savings:

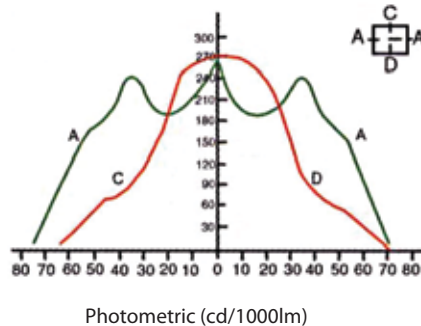
Up to 560 kilo-watt hours/year; 8,400 kilo-watt hours over the product's lifetime.

Greenhouse Gas (CO₂) Reduction:

Up to 868 lbs/yr; 13,020 lbs. over the product's lifetime - about as much CO₂ as the average passenger car produces in 8 months of driving.²

¹ Savings based on replacement of 250W High Pressure Sodium light or 250W Metal Halide with 135W Induction Lamp.

² Saving based on U.S. average 1.55 lbs CO₂ per kwh, 11,560 lbs CO₂ per passenger car per year.



Specifications:

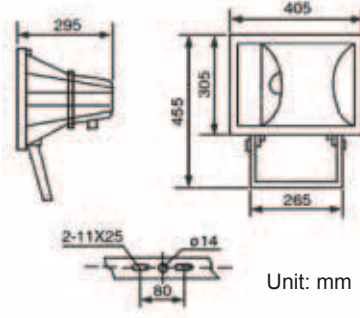
Model	35W	50W	85W	135W	150W
Radio Frequency	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz
Rated Power	35W	50W	85W	135W	150W
Current (220V)	0.16A	0.23A	0.39A	0.63A	0.70A
Power Factor	0.98	0.98	0.98	0.98	0.98
Starting Time	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s
Luminous Flux	2450 lm	3500 lm	5950 lm	9450 lm	10500 lm
CCT	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K
CRI	> 80	> 80	> 80	> 80	> 80
Rated Product Life	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.

Applications:

- ⊕ Building perimeters, entrances, facades
- ⊕ Construction site, emergency site lighting
- ⊕ Sign lighting
- ⊕ Landscape lighting

Features:

- Heavy-duty die-cast aluminum housing
- High purity aluminum, anti-glare reflector specially designed for Induction Lamp
- Heat and shock resistant tempered glass
- Enclosed and gasketed optical
- Corrosion-resistant hardware
- Hinged front cover for easy installation and maintenance
- For up to 165W induction lamp applications
- Induction lamp included



Model EW-3170FX

Cost Savings:

Save up to \$80 per year per light; \$1,200 over the product's lifetime.¹

Energy Savings:

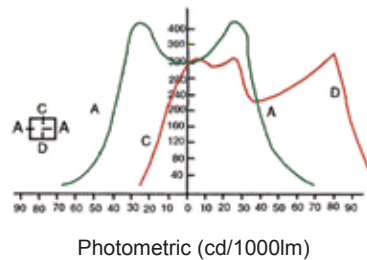
Up to 560 kilo-watt hours/year; 8,400 kilo-watt hours over the product's lifetime.

Greenhouse Gas (CO₂) Reduction:

Up to 868 lbs/yr; 13,020 lbs. over the product's lifetime - about as much CO₂ as the average passenger car produces in 8 months of driving.²

¹ Savings based on replacement of 250W High Pressure Sodium light or 250W Metal Halide with 135W Induction Lamp.

² Saving based on U.S. average 1.55 lbs CO₂ per kwh, 11,560 lbs CO₂ per passenger car per year.



Specifications:

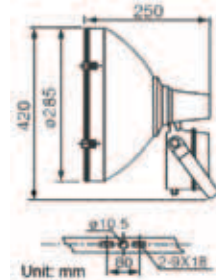
Model	35W	50W	85W	135W	150W
Radio Frequency	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz
Rated Power	30W	50W	85W	135W	150W
Current (220V)	0.16A	0.23A	0.39A	0.63A	0.70A
Power Factor	0.98	0.98	0.98	0.98	0.98
Starting Time	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s
Luminous Flux	2450 lm	3500 lm	5950 lm	9450 lm	10500 lm
CCT	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K
CRI	> 80	> 80	> 80	> 80	> 80
Rated Product Life	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.

Applications:

- ⬢ Building perimeters, entrances, facades
- ⬢ Construction site, emergency site lighting
- ⬢ Sports fields
- ⬢ Landscape lighting

Features:

- Heavy-duty die-cast aluminum ballast housing
- Anodic oxidation aluminum, anti-glare reflector specially designed for Induction Lamp
- Heat and shock resistant tempered glass
- Enclosed and gasketed optical
- Corrosion-resistant hardware
- For up to 165W induction lamp applications
- Induction lamp included



Model EW-3201FX

Model EW-3200FX

Cost Savings:

Save up to \$80 per year per light; \$1,200 over the product's lifetime.¹

Energy Savings:

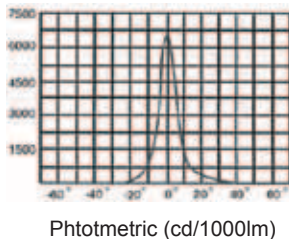
Up to 560 kilo-watt hours/year; 8,400 kilo-watt hours over the product's lifetime.

Greenhouse Gas (CO₂) Reduction:

Up to 868 lbs/yr; 13,020 lbs. over the product's lifetime - about as much CO₂ as the average passenger car produces in 8 months of driving.²

¹ Savings based on replacement of 250W High Pressure Sodium light or 250W Metal Halide with 135W Induction Lamp.

² Saving based on U.S. average 1.55 lbs CO₂ per kwh, 11,560 lbs CO₂ per passenger car per year.



Specifications:

Model	35W	50W	85W	135W	150W
Radio Frequency	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz
Rated Power	30W	50W	85W	135W	150W
Current (220V)	0.16A	0.23A	0.39A	0.63A	0.70A
Power Factor	0.98	0.98	0.98	0.98	0.98
Starting Time	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s
Luminous Flux	2450 lm	3500 lm	5950 lm	9450 lm	10500 lm
CCT	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K
CRI	> 80	> 80	> 80	> 80	> 80
Rated Product Life	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.

Applications:

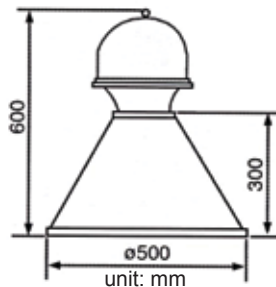
- ⊕ Factories
- ⊕ Foundries
- ⊕ Work shops
- ⊕ Warehouses
- ⊕ Retail stores and super markets
- ⊕ Commercial and industrial complexes
- ⊕ Sports complexes



Model EW-3030FX

Features:

- Heavy-duty die-cast aluminum ballast housing
- High purity aluminum reflector specially designed for Induction Lamp
- Enclosed and gasketed optical
- For 10 to 30 ft. (3 m to 10 m) applications
- Fits up to 165W Induction Lamp
- Induction lamp included



Cost Savings:

Save up to \$80 per year per light; \$1,200 over the product's lifetime.¹

Energy Savings:

Up to 560 kilo-watt hours/year; 8,400 kilo-watt hours over the product's lifetime.

Greenhouse Gas (CO₂) Reduction:

Up to 868 lbs/yr; 13,020 lbs. over the product's lifetime - about as much CO₂ as the average passenger car produces in 8 months of driving.²

¹ Savings based on replacement of 250W High Pressure Sodium light or 250W Metal Halide with 135W Induction Lamp.

² Saving based on U.S. average 1.55 lbs CO₂ per kwh, 11,560 lbs CO₂ per passenger car per year.



Model EW-3040FX

Specifications:

Model	35W	50W	85W	135W	150W
Radio Frequency	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz	2.68 mhz
Rated Power	35W	50W	85W	135W	150W
Current (220V)	0.16A	0.23A	0.39A	0.63A	0.70A
Power Factor	0.98	0.98	0.98	0.98	0.98
Starting Time	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s	< 0.5 s
Luminous Flux	2450 lm	3500 lm	5950 lm	9450 lm	10500 lm
CCT	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K	2,700-6,500 K
CRI	> 80	> 80	> 80	> 80	> 80
Rated Product Life	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.	60,000 hr.

