

Philips Ceramalux® High Pressure Sodium Non-Cycling Lamps featuring ALTO® Lamp Technology

Ideal for street and roadway lighting, parking lots and garages, warehouses and manufacturing facilities where lower maintenance costs are desired

High Pressure Sodium



† This lamp is better for the environment because of its reduced mercury content. All Philips ALTO® lamps give you end-of-life options which can simplify and reduce your lamp disposal costs depending on your state and local regulations.



Reduce maintenance costs

Philips Ceramalux® High Pressure Sodium Non-Cycling Lamps are a better value than standard high pressure sodium lamps, with longer life and reduced maintenance cost.

Rated average life of 30,000 hours*

- 65% lamp survival at 30,000 hours rated average life
- 80% lamp survival at 24,000 hours rated average life
- 25% longer life than standard HPS lamps

Reduces maintenance costs

- Lamp goes out—stays out
- Eliminates unnecessary service trips to replace lamp
- More resistant to outages caused by vibration and line voltage fluctuations

Environmentally responsible

- Passes the US EPAs TCLP for non hazardous waste†
- Sustainable lighting solution: Up to 90% less mercury than standard Philips Ceramalux® High Pressure Sodium Lamps and lead free

Direct replacement for standard HPS lamps

- Offers higher lumen output for most wattages‡
- 90% lumen maintenance
- Operates on HPS ballasts of similar wattages

(*; †; ‡ See back page for footnotes)

PHILIPS

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Ordering, Electrical and Technical Data (Subject to change without notice)

Product Number	Ordering Code	ANSI Code	Nom. Watts	Bulb Type	Base	Pkg. Qty.	Bulb Finish	LCL (In.)	MOL (In.)	Avg. Life (Hrs.) ¹	Rated Initial Lumens ²	Approx Mean Lumens ³	Approx Temp. (Kelvin) ⁴
20224-2	C50S68/ALTO NC HPS	S68	50	ED23½	Mogul	20	Clear	5	7½	30,000	4000	3600	2100
14739-7	C70S62/ALTO NC HPS	S62	70	ED23½	Mogul	12	Clear	5	7½	30,000	6300	5670	2100
14740-5	C100S54/ALTO NC HPS	S54	100	ED23½	Mogul	12	Clear	5	7½	30,000	10,000	9000	2100
14741-3	C150S55/ALTO NC HPS	S55	150	ED23½	Mogul	12	Clear	5	7½	30,000	16,000	14,400	2100
15725-5	C200S66/ALTO NC HPS	S66	200	ED18	Mogul	12	Clear	5½	9½	30,000	22,000	19,800	2100
14742-1	C250S50/ALTO NC HPS	S50	250	ED18	Mogul	12	Clear	5½	9½	30,000	28,500	25,650	2100
14743-9	C400S51/ALTO NC HPS	S51	400	ED18	Mogul	12	Clear	5½	9½	30,000	50,000	45,000	2100
15726-3	C1000S52/ALTO NC HPS	S52	1000	ED25	Mogul	6	Clear	8½	15½	30,000	130,000	117,000	2100

1) Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start. It is based on survival of 65% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average.

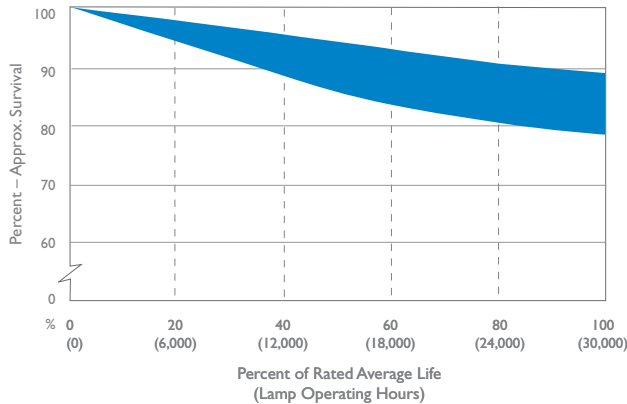
2) Approximate lumen values listed are for vertical or horizontal operation of lamp.

3) Approximate mean lumen output at 40% of lamp rated average life.

4) Approximate color temperature in Kelvin degrees.

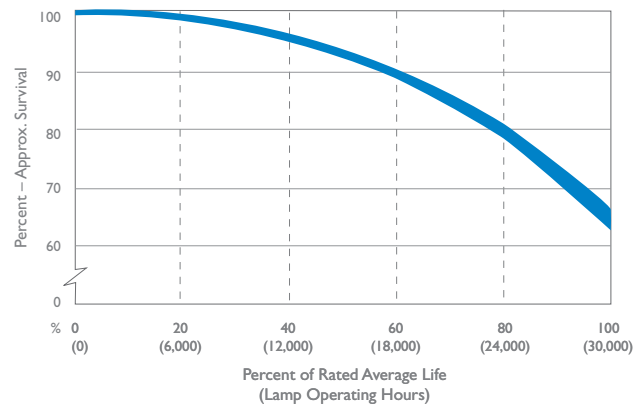
Approximate Lumen Maintenance

Ceramalux® High Pressure Sodium Non-Cycling



Approximate Survival Curve

Ceramalux® High Pressure Sodium Non-Cycling



Footnotes from front page:

* Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start.

† It is based on survival of 65% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average.

‡ The TCLP is the US EPA's Toxicity Characteristic Leaching Procedure. Check state and local regulations regarding non-hazardous waste.

§ Higher lumen output for 50, 100, 150, 200, and 250 watts and equivalent for 400W, and less for 1000W.

RECOMMENDED WARNINGS, CAUTIONS, AND OPERATING INSTRUCTIONS

WARNING: These lamps must be operated in fixtures designed for use with High Pressure Sodium lamps. The fixture wattage rating must match the wattage indicated on the outer glass bulb. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the glass is struck. Operating the lamp improperly may result in **PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

- 1) If the outer glass bulb is broken, shut off power immediately and remove the lamp after it has cooled.
- 2) Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.
 - A. Operate lamp only within specified limits of operation.
 - B. For total supply load refer to ballast manufacturers electrical data.

- 3) Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
- 4) Replace the lamp if the outer glass bulb has been scratched, cracked or damaged in any way.
- 5) If a lamp bulb support is used, be sure to insulate the support electrically so as to avoid possible decomposition of the bulb glass.
- 6) Do not use this lamp in a fixture which redirects a substantial portion of the energy toward the arc tube and its immediate vicinity, as this may lead to very early lamp failure.
- 7) Take care in handling and disposing of lamps. If arc tube is broken, avoid skin contact with any of the contents or fragments.
- 8) The arc tube of this lamp contains sodium and mercury. Dispose of in accordance with federal, state and local requirements.



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 Printed in USA 2/09
 P-5781-C
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