

Philips Green Power
CDM-TP Lamps

*Ideal for green houses,
growth chambers, and other
horticulture applications*

Green Power CDM



An efficient growth light lamp

Philips Green Power CDM-TP Lamps provide outstanding growth light performance and substantial energy savings when combined with an efficient ballast.

Superior performance

- Excellent PPF (Photosynthetic Photon Flux) – 1.9 umols/s
- Superior lumen/PPF maintenance of 90% at 8,000 hours
- Long life – 20,000-hour rated average life[†]
- Suitable for use in open fixtures

Reduced cost of ownership

- Higher growth light compared to 400W HPS lamps*
- 93% ballast efficiency can provide substantial energy savings
- Increased time between re-lamping cycles when compared to standard metal halide lamps**

(†, *, ** See back page for footnotes)

PHILIPS
sense and simplicity

Philips Green Power CDM-TP Lamps

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

Product Number	Ordering Code	Nom. Watts	ANSI Code	Approx. Initial Lumens ¹	Approx. Mean Lumens ²	Efficacy (lm/w)	Color Temp. (Kelvin)	CRI	Burn Position	Rated Avg. Life (Hrs.) ³	PPF (umol/sec)
41521-6	Green Power CDM-TP 315W/T12/U/O	315	C182/O	33,000	29,700	104	3200	90	Universal	20,000	1.9

1) Measured at 100 hours of life in a vertical operating position. Measured at rated lamp watts on electronic ballast. Lumens per watt does not include ballast losses.

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

3) 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 at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average

Footnotes from front:

† 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 at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average

* When comparing Philips 400W HPS lamp PPF value (1.7) with Green Power CDM-TP Lamp PPF value (1.9).

** Point at which 10% failure point for standard 400W metal halide is approximately 9000 hours compared to 12,000 hours for Green Power CDM-TP Lamp.

WARNINGS, CAUTIONS, AND OPERATING INSTRUCTIONS FOR MASTERCOLOR CDM ELITE MEDIUM WATT CERAMIC METAL HALIDE AND GREEN POWER CDM-TP LAMPS

R“WARNING: These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.” This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21 CFR 1040.30 Canada:SOR/DORS/80-381

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. 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 envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture. This lamp contains an arc tube with a filling gas containing Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey, 08873.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC-TUBE RUPTURE THE FOLLOWING **LAMP OPERATING INSTRUCTIONS** MUST BE FOLLOWED:

LAMP OPERATING INSTRUCTIONS:

- Relamp fixtures at or before the end of rated life. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
- If the lamp is marked on the base with /E, use only in enclosed fixture capable of withstanding particles of glass having temperatures up to 1000°C. If the lamp is marked on the base with /O, lamp should retain all the glass particles should inner arc tube rupture occur.
- Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
- Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer:
 - Operate lamp only within specified limits of operation.
 - For total supply load refer to ballast manufacturers electrical data.
 - All Pulse Start lamps require a socket rated to withstand a 4,000 volt pulse

- Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
- If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
- Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
- Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock, and color appearance may vary between individual lamps.
- Lamps may require 10 minutes to re-light if there is a power interruption.
- Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.
- Use this lamp only in fixtures that contain a Pulse Start metal halide ballast and are specific designed for use with Pulse Start metal halide lamps.

