

LED®

Retrofit
for NEMA HEAD

americanlite®

We light your world™

CE

12.09.15



LED Retrofit for NEMA Head

Product Overview

Advances in LED technology allow us to create new exciting options for illumination. The benefits of ambient LED lighting are extraordinary compared to outdated fluorescent and more particular to High Intensity Discharge lighting systems

Americanlite® LED Retrofit incorporates the latest LED technology to replace traditional mercury vapor, high pressure sodium lamps or compact fluorescent lamps in standard NEMA HEAD fixtures. The lamp can be replaced in a matter of minutes and no fixture modification, no wiring, no ballast replacement, just like changing a light bulb.

Avances en la tecnología LED nos permiten crear excitantes opciones de iluminación. Los beneficios de la iluminación LED son extraordinarios comparado con la tecnología fluorescente y más particularmente a los sistemas de alta intensidad de descarga.

Americanlite® LED Retrofit incorpora la tecnología LED más actualizada para remplazar lámparas de vapor de mercurio, sodio de alta presión o lámparas fluorescentes en las luminarias NEMA HEAD. La lámpara puede ser remplazada en minutos sin necesidad de hacer ninguna modificación a la luminaria, no es necesario cablear, no se requiere remplazar balastro, tan simple como cambiar un foco.

Americanlite® LED Retrofit can be used on residential areas, rural areas, office and warehouses.



Americanlite® LED Retrofit puede ser usado en áreas residenciales, áreas rurales, oficinas y bodegas.

LED Retrofit for HID lamps

Replaces mercury vapor or high pressure sodium lamps, ideally for applications up to 6m.

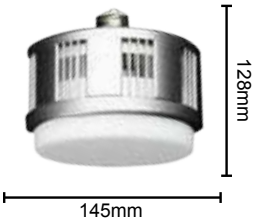
26w*

- 2600 lumen output (Opal Drop Lens)
- 2860 lumen output (Clear Flat Lens)
- Medium socket/ Mogul socket
- 30,000 hours life expectancy
- Instant on and instant restrike
- 70-75 CRI greatly improves color quality
- THD <30%
- 5 year warranty

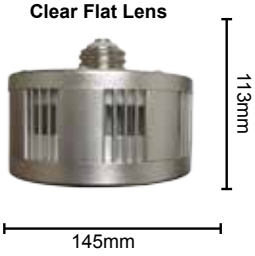
30w**

- 3000 lumen output (Opal Drop Lens)
- 3300 lumen output (Clear Flat Lens)
- Medium socket/ Mogul socket
- 30,000 hours life expectancy
- Instant on and instant restrike
- 70-75 CRI greatly improves color quality
- THD <30%
- 5 year warranty

Drop Opal Lens



Clear Flat Lens



Electrical:

Input Voltage:	90-265V
Power Factor:	>0.95*
THD:	<30%
Color Temp.:	6500K replaces 175W MV 4100K replaces 100W MH 2700K replaces 100W HPS
Environmental OperatingTemp.:	-40°C to 50°C

*Power factor with capacitor: >0.90
without capacitor: >0.50

* The power of the LED is 26w, when connected to the ballast the total consumption is 30w.

** The power of the LED is 36w, when connected to the ballast the total consumption is 34w.



LED Retrofit for NEMA Head

Visible light and the scotopic/photopic (S/P) Ratio

Recent research has discovered that the lumen alone may not be the best way to show how the eye perceives the power of light. Our eyes use both rods and cones to see light, rods are more sensitive to blue light (scotopic vision) and cones to yellow light (photopic vision). The present use of the lumen is based on the assumption that the cones in the eye are the chief light perceivers, this research shows that the human eye relies more than previously believed on its rods, the light that stimulates the rods in the eye is known as a Pupil lumen. Scotopic/photopic ratios have been developed that attempt to replicate a measurement system more akin to how our eyes perceive brightness.



Luz visible y la Razón escotópica/ fotópica

Estudios recientes han descubierto que no solamente el lumen es la mejor forma de mostrar como el ojo percibe la luz. Nuestros ojos usan bastoncillos y conos para ver la luz, los bastoncillos son más sensibles a la luz azul o temperaturas frías de color (visión escotópica) y los conos a la luz amarilla o temperaturas cálidas (visión fotópica).Actualmente el uso del lumen está basado en la asunción que los conos son los perceptores primarios de la luz. Los estudios revelan que el ojo humano depende más (de lo que antes se pensaba) en los bastoncillos; la luz que estimula los bastoncillos en el ojo se conoce como lumen de pupila. Se ha desarrollado una relación escotópica/fotópica (iluminación mesópica) para replicar el sistema de medición acorde a cómo nuestros ojos perciben el brillo.

Visible light and the scotopic/photopic (S/P) Ratio Comparison

System	Initial Lumen	Lumen Maintenance	EOL Lumens	Fixture efficiency	EOL lumens per fixture	S/P Ratio	Net EOL Lumens per fixture	Fixture input watts	Efficacy Net EOL Lumens/ Watt
LED 26W	2,600	93%	1,860	0.92	1,711	1.62	2,771	30	92
HPS100	9,500	70%	6,650	0.75	4,987	0.62	3,092	100	31
MV175	7,900	50%	3,950	0.75	2,962	0.88	2,606	175	15

TOTAL COST

LED retrofit for NEMA HEAD offers dramatic energy saving opportunities over HID lighting systems and provide quick returns. Fixtures using LED lamps consume a lot less energy than High Intensity Discharge lighting systems. This, combined with their longer lifespan, translates into significant savings.

On a typical 12 hours of daily use, the 26W LED retrofit for NEMA HEAD consumes 0.36Kwh compared to a 175W Mercury Vapor that consumes 2.1Kwh, there's a saving of 1.74Kwh per day, at a cost of $0.25 per kilowatt an hour. That's a daily saving of $0.44 or $13.05, per month.

COSTO TOTAL

LED retrofit para NEMA HEAD ofrece dramáticos ahorros de energía sobre sistemas de limunación de alta intensidad de descarga, además, con la larga vida del LED el resultado es un rápido retorno a la inversión. Las luminarias con lámparas LED utilizan menos energía que los sistemas de iluminación de alta intensidad de descarga. Esto, combinado con la larga vida del LED, se traduce en ahorro en costos significativos.

En un día normal de 12 horas de uso diarias, el LED NEMA HEAD de 26W consume 0.36Kwh comparado a 2.1Kwh de un vapor de mercurio de 175W, existe un ahorro de 1.74Kwh, a un costo de $0.25 por kilowatt hora hay un ahorro diario de $0.44 o $13.05 mensual.



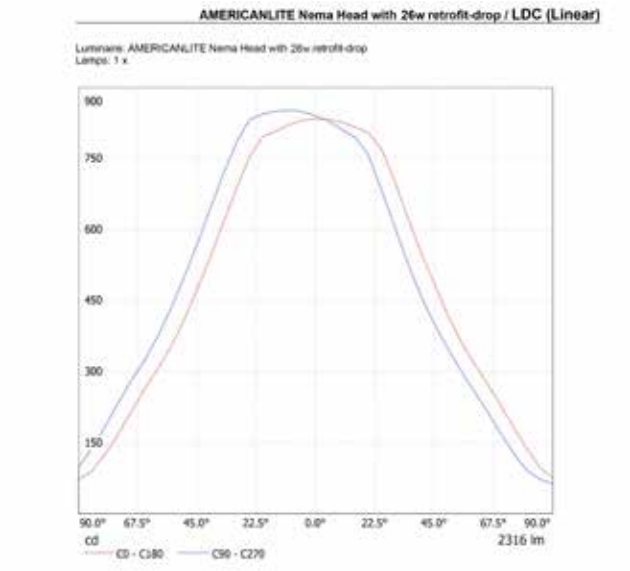
LED Retrofit for NEMA Head

Test Report for 26w

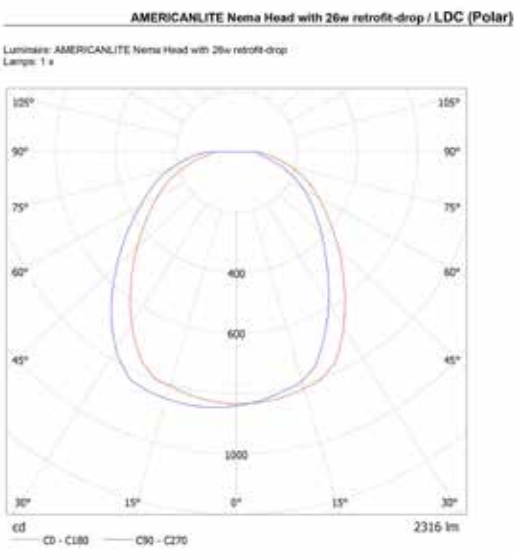
OUTDOOR PHOTOMETRIC REPORT
CATALOG: NEMA HEAD WITH 26W RETROFIT-DROP

MANUFACTURER:	AMERICANLITE
CATALOG #:	NEMA HEAD WITH 30W RETROFIT-DROP
LUMINAIRE:	
LAMP OUTPUT:	TOTAL LUMINAIRE LUMENS: 2316.3
	TEST BASED ON ABSOLUTE PHOTOMETRY *
INPUT WATTAGE:	25.9
LUMINOUS OPENING:	RECTANGLE W/LUMINOUS SIDES (L: 14173.23", W: 14173.23", H: 16535.43")
MAX CD:	858.5 AT HORIZONTAL: 210°, VERTICAL: 5°
ROADWAY CLASS:	VERY SHORT, TYPE II

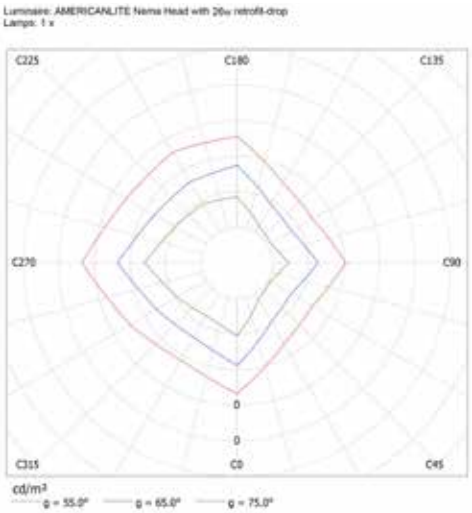
Americanlite Nema Head with 26w Retrofit-drop
LDC (Linear)



Americanlite Nema Head with 26w Retrofit-drop
LDC (Polar)



Americanlite Nema Head with 26w Retrofit-drop/Luminance Diagram





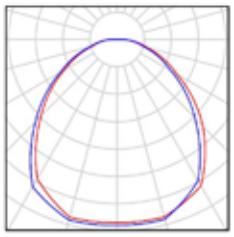
LED Retrofit for NEMA Head

Test Report for 30w

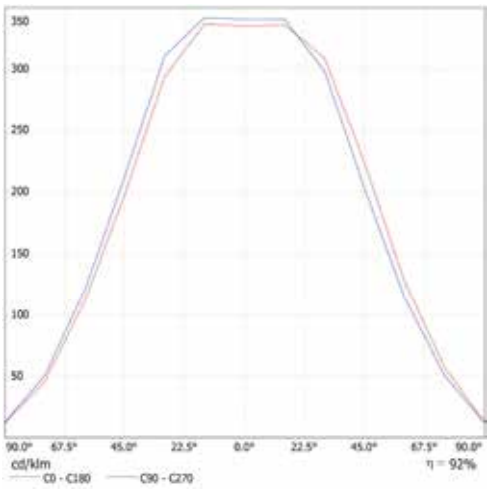
AMERICANLITE LED Nema Head w/ retrofit 30W

Article No.: LED Nema Head w/ retrofit 30W
Luminous flux (Luminaire): 3031 lm
Luminous flux (Lamps): 3300 lm
Luminaire Wattage: 29.4 W
Luminaire classification according to CIE: 100
CIE flux code: 51 81 95 100 92
Fitting: 1 x User defined (Correction Factor 1.000).

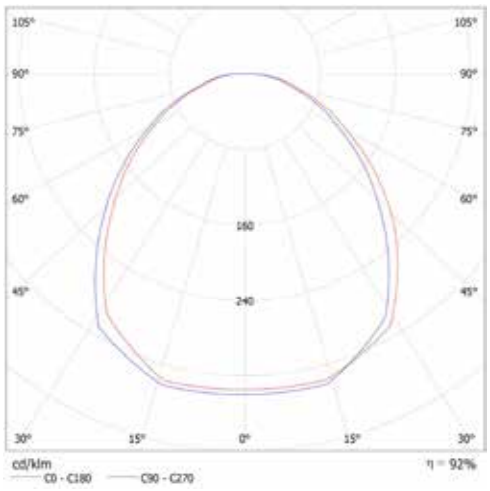
See our luminaire catalog for an image of the luminaire.



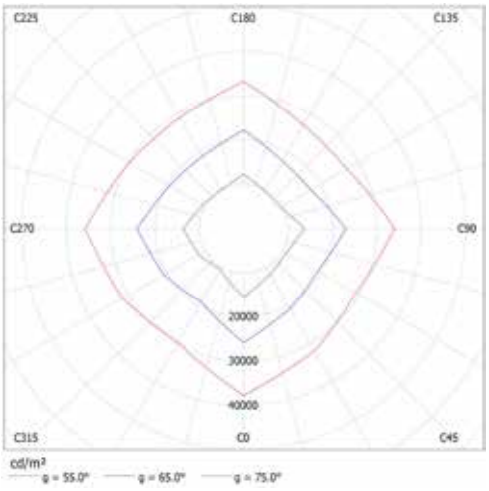
Americanlite Nema Head with 30w Retrofit-drop LDC (Linear)



Americanlite Nema Head with 30w Retrofit-drop LDC (Polar)



Americanlite Nema Head with 30w Retrofit-drop/Luminance Diagram





LED Retrofit for NEMA Head

Product Guide
Guía de Producto

Line	Type	WATTS	Lens	Temperature	Socket
RNH	**LED**	**W**	**O**	**27**	**27**
RNH Retrofit Nema Head		2 26w 3 30w	O Opal Drop C Clear Flat	27 2700K 41 4100K 65 6500K	M Medium G Mogul

LED Retrofit

Color Box	Modelo	W	Voltage	Base	Temp
AL574053	LEDRNH2OE2727	26	90-265V	Medium	2700K
AL574054	LEDRNH2OE2741	26	90-265V	Medium	4100K
AL574055	LEDRNH2OE2765	26	90-265V	Medium	6500K
AL574056	LEDRNH2O27G	26	90-265V	Mogul	2700K
AL574057	LEDRNH2O41G	26	90-265V	Mogul	4100K
AL574058	LEDRNH2O65G	26	90-265V	Mogul	6500K
AL574061	LEDRNH2C65G	26	90-265V	Mogul	6500K
AL574066	LEDRNH3O65G	30	90-265V	Mogul	6500K
AL574068	LEDRNH3C65G	30	90-265V	Mogul	6500K



Warranty

Americanlite® is pleased to provide 5 year limited warranty covering the LED fixture in this catalogue. Americanlite® warrants that the LED fixtures comply with Americanlite®'s published specifications and are free from defects in materials and workmanship.

All our equipment is CE, ETL or UL approved and manufactured with approved components. Americanlite® reserves the right to change or improve the design or components of any of its products due to parts availability or changes in standards, without assuming any obligation to modify any product previously manufactured and without notice. All equipment is tested and inspected before shipment.

This warranty is void if the product is operated outside of its normal operating conditions. The foregoing warranty does not apply to failures caused by acts of God or as a result of any abuse, misuse, abnormal use, or use in violation of any applicable standard, code or instructions for use in installations, including, but not limited to, those contained in the Standards for the International Electrotechnical Commission. Americanlite® reserves and has the right to examine failed lamp to determine the cause of failure, excessive lumen depreciation and patterns of usage.