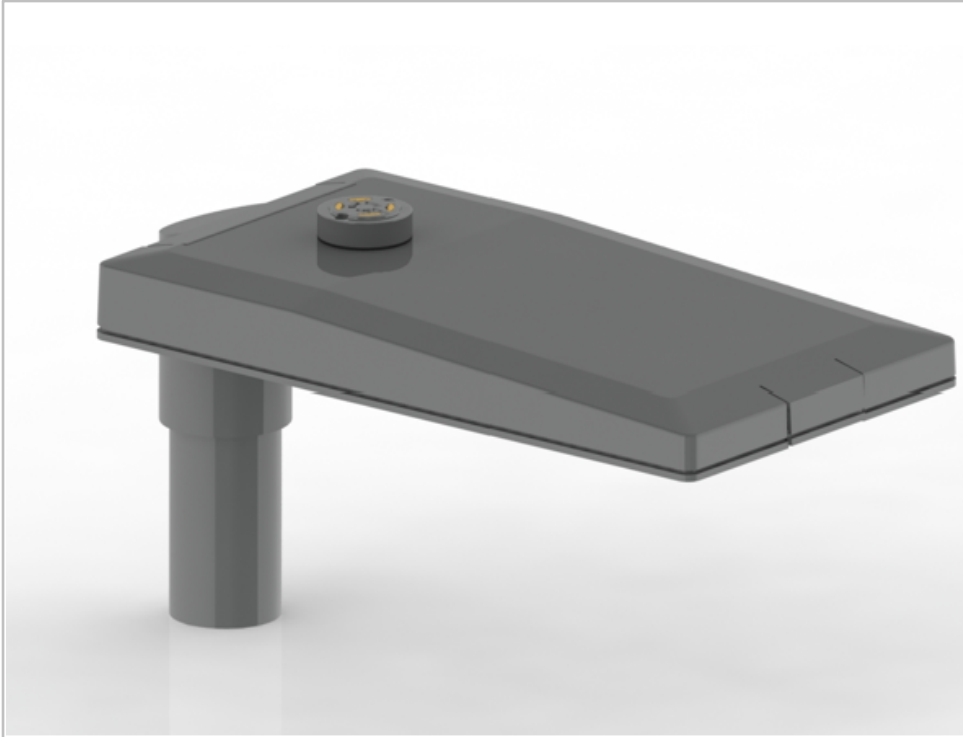
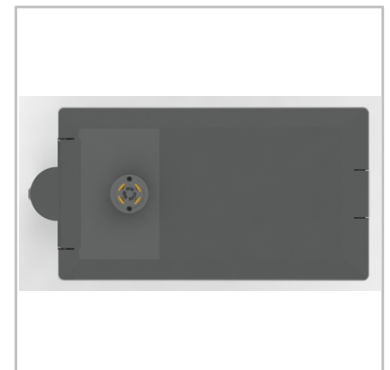


# NIGHTSTAR



Designer : Schröder



## A time-saving, versatile and high-performing road and urban solution

Based on Schröder's experience and proven track record with road and urban LED lighting, the NIGHTSTAR luminaire benefits from numerous innovations to provide the best experience for all stakeholders in public lighting: cities looking for a fast return on investment with an environmentally friendly, easy-to-operate lighting solution, contractors wanting to save time and avoid mistakes during installation, and citizens requiring safe and comfortable environments.

This connected-ready range of luminaires not only offers a realistic platform for smart cities; its compact, lightweight, optimised design minimises the carbon footprint at every stage of the product lifecycle. NIGHTSTAR stands out as the best in class for a circular economy.



## Concept

NIGHTSTAR is a robust yet compact luminaire, designed with a focus on ease of installation and maintenance, enabling customers to extend its lifetime with future upgrades. Composed of a high-pressure, die-casted aluminium body sealed with a tempered flat glass protector, offering a high degree of tightness and resistance to shocks.

Available in two sizes with a LED count of 10 to 80 LEDs, NIGHTSTAR provides a well-dimensioned, efficient lighting solution ranging from various low-height applications such as parks, bicycle paths or residential streets to main roads, boulevards and motorways.

The NIGHTSTAR range takes advantage of the latest photometric innovations. It uses the new LensoFlex®4 photometric engine, which has been developed around the ideas of performance, compactness, versatility and standardisation. Specifically designed to provide safety and comfort in urban environments.

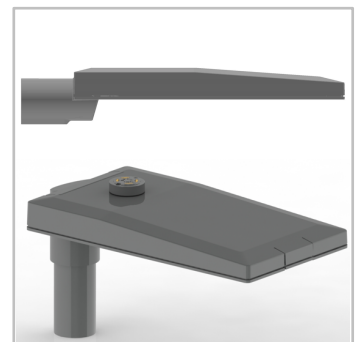
To simplify installation and maintenance operations, NIGHTSTAR introduces technologies such as the universal fixation system enabling post-top or side-entry mounting. The luminaire offers tool-free access to the gear compartment. The top cover hinges upwards and is retained by a bracket. Closing of the luminaire is confirmed when the clamp clicks in place with a clear, loud clicking noise, audible even in a noisy urban environment.

Supplied pre-wired (optional), NIGHTSTAR is adapted to post-top and side-entry mounting on any spigot (Ø42-48mm, Ø60mm and Ø76mm). The universal fixation system enables switching from one position to another at any time. This unique feature eases installation and offers complete versatility regarding pole and bracket configurations.

The universal fixation system fully complies with SA/SNZ TS 1158.6:2015 vibration standards.



NIGHTSTAR integrates highly efficient photometrical platforms.



The universal fixation system with switching from a post-top to a side-entry position facilitates ordering and installing luminaires.

## TYPES OF APPLICATION

- URBAN & RESIDENTIAL STREETS
- BRIDGES
- BIKE & PEDESTRIAN PATHS
- RAILWAY STATIONS & METROS
- CAR PARKS
- SQUARES & PEDESTRIAN AREAS
- ROADS & MOTORWAYS

## KEY ADVANTAGES

- Maximised savings in energy and maintenance costs
- New generation of LensoFlex®4 photometric engines offering high-efficiency lighting, comfort and safety
- 2 sizes to provide the most accurate solution for numerous road and urban applications
- Tool-free access with a clear, perceptible click upon closing
- Post-top or side-entry
- Wide range of operating temperatures
- Zhaga-D4i certified
- Connected-ready



NIGHTSTAR is compatible with Circle Light Application, a straightforward, quick and cost-effective tool to interact with the luminaire, capture its data and manage settings.



NIGHTSTAR is connected-ready and can operate with various sensors and control systems.



LensoFlex®4

LensoFlex®4 maximises the heritage of the LensoFlex® concept with a very compact yet powerful photometric engine based upon the addition principle of photometric distribution. The number of LEDs in combination with the driving current determines the intensity level of the light distribution. With optimised light distributions and very high efficiency, this fourth generation enables the products to be downsized to meet application requirements with an optimised solution in terms of investment.

LensoFlex®4 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.



Embellishment plate / Light Exhauster

The Embellishment plate / Light Exhauster not only provides a more aesthetic solution as it covers the wires supplying the PCBA's with power, it also increases the lumen output thanks to its extra bright surface that reflects light out of the optical unit.

Depending on the configuration, the Embellishment plate / Light Exhauster can increase the lumen output by 2 to 3%.

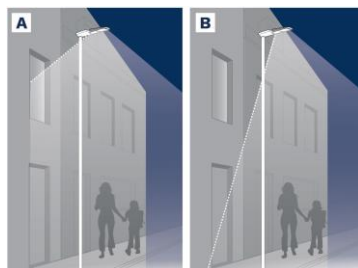


Optional

Back Light control

As an option, the LensoFlex®4 modules can be equipped with a Back Light control system.

This additional feature minimises light spill from the back of the luminaire to avoid intrusive light towards buildings.



A. Without Back Light control | B. With Back Light control

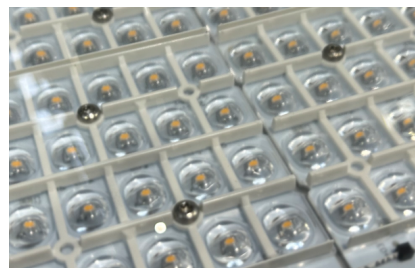


Optional

Glare Limitor control

As an option, the LensoFlex®4 modules can be equipped with a Glare Limitor control system.

The Glare Limitor or anti-glare louvre is a useful accessory when the installation requires a specific glare reduction solution which cannot be provided by the lens only. It is designed to cut the light downwards only at high angles. The purpose is to reduce glare and minimise light intensity at high angles.



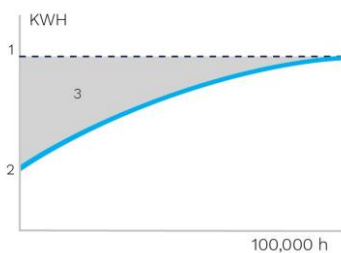


## Optional

### Constant Light Output (CLO)

This system compensates for the depreciation of luminous flux to avoid excess lighting at the beginning of the installation's service life. Luminous depreciation over time must be taken into account to ensure a predefined lighting level during the luminaire's useful life.

Without a CLO feature, this simply means increasing the initial power upon installation in order to make up for luminous depreciation. By precisely controlling the luminous flux, the energy needed to reach the required level can be maintained throughout the luminaire's life.



1. Standard lighting level | 2. LED lighting consumption with CLO | 3. Energy savings

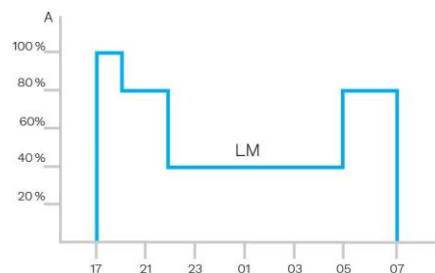


## Optional

### Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring.

The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



A. Dimming level | B. Time



## Optional

### PIR sensor: motion detection

In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area.

Each luminaire level can be configured individually with several parameters such as minimum and maximum light output, delay period and ON/OFF duration time. PIR sensors can be used in an autonomous or interoperable network.



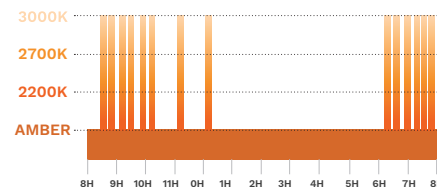
## Optional

### FlexiWhite

The Schröder FlexiWhite solution offers you the freedom to use the right colour temperature at any time. Whether it relies on pre-programmed scenarios, works with a remote control system, uses sensors or a mix of all, the FlexiWhite solution offers you the flexibility to provide the right level with the right colour temperature at the right place and the right time.

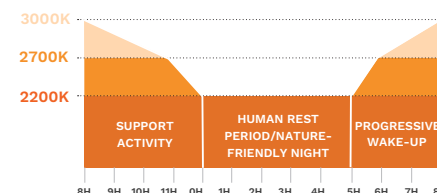
### MODEL #1 Preservation of nature, promotion of motor-free mobility

Environment: Bike/pedestrian path FlexiWhite solution: Amber as default, 3000K upon detection.



### MODEL #2 Attractiveness, ambiance and circadian rhythm

Environment: City centre FlexiWhite solution: 2200K, 3000K and everything in between.



## GENERAL INFORMATION

Recommended installation height	4m to 14m   13' to 49'
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
Driver included	Yes
RCM mark	Yes
ROHS compliant	Yes
Dark Sky friendly (IDA certification)	Yes
Testing standard	EMC compliant: AS/NZS CISPR15 Luminaire Performance: AS/NZS 60598.1 & AS/NZS 60598.2.3 LM 79-08 (all measurements in ISO17025 accredited laboratory) LM 80 (all measurements in ISO17025 accredited laboratory)

## HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass
Housing finish	Polyester powder coating
Standard colour	RAL 9005 Black Textured RAL 7043 Grey Textured (optional)
· Any other RAL or Dulux colour upon request	
Tightness level	
Impact resistance	IK 08 (IK 09 optional)
Vibration test	Compliant with SA/SNZ TS 1158.6:2015
Access for maintenance	Tool-less access to gear compartment

## OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +40°C
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· Depending on the luminaire configuration. For more details, please contact us.

## ELECTRICAL INFORMATION

Electrical class	Class I (Class II optional)
Nominal voltage	220-240V – 50-60Hz
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	AS/NZS CISPR15
Control protocol(s)	DALI (1-10V optional)
Control options	AmpDim, Bi-power, Custom dimming profile, Photocell, Remote management
Socket	NEMA 7-pin Zhaga (optional)
Associated control system(s)	Schröder EXEDRA
Sensor(s)	Devices & sensors for Smart City applications

## OPTICAL INFORMATION

LED colour temperature	3000K (WW 830)
	4000K (NW 840 optional)
	2200K (WW 722 optional)
	2700K (WW 727 optional)
	3000K (WW 730 optional)
	4000K (NW 740 optional)
Colour rendering index (CRI)	5700K (CW 757 optional)
	>80 (WW 830)
	>80 (NW 840 optional)
	>70 (WW 722 optional)
	>70 (WW 727 optional)
	>70 (WW 730 optional)
ULOR	>70 (NW 740 optional)
	>70 (CW 757 optional)
	0%
ULR	0%

· ULOR may be different according to the configuration. Please consult us.

· ULR may be different according to the configuration. Please consult us.

## LIFETIME OF THE LEDS @ TQ 40°C

All configurations	88,000h - L95 (high-power LEDs)
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· Lifetime may be different according to the size/configurations. Please consult us.

## DIMENSIONS AND MOUNTING

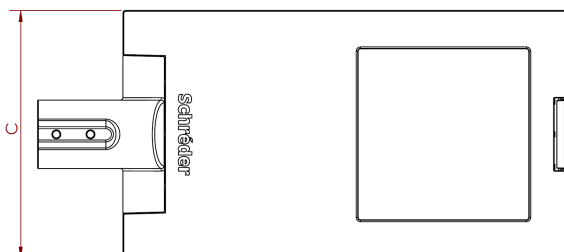
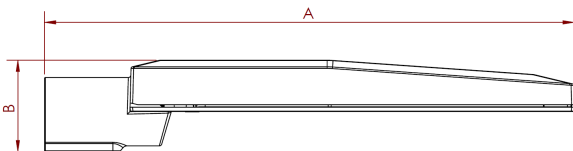
AxBxC (mm) NIGHTSTAR MINI : 620x107x290  
NIGHTSTAR MIDI : 670x107x340

Weight (kg) NIGHTSTAR MINI : 7.0  
NIGHTSTAR MIDI : 9.0

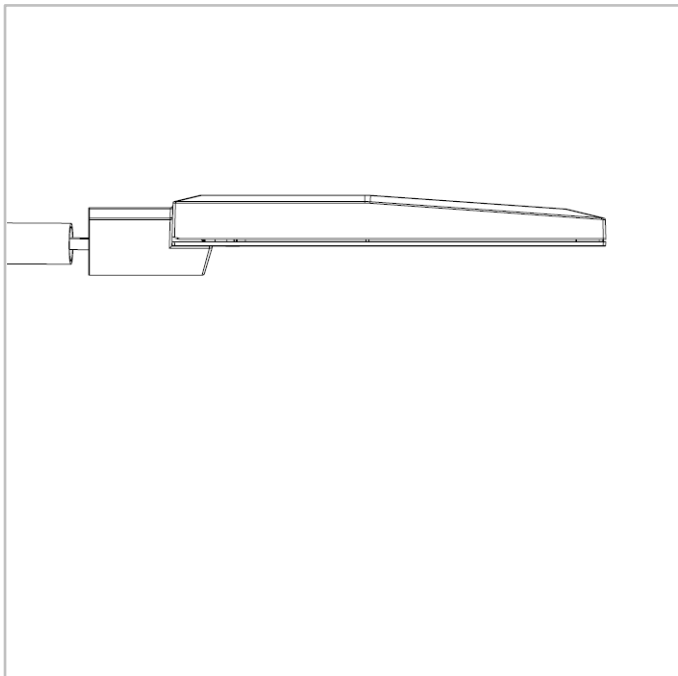
Aerodynamic resistance (CxS) NIGHTSTAR MINI : 0.03  
NIGHTSTAR MIDI : 0.03

Mounting possibilities  
Side-entry – Ø60mm  
Side-entry – Ø42-48mm (optional)  
  
Post-top – Ø60mm  
Post-top – Ø76mm (optional)

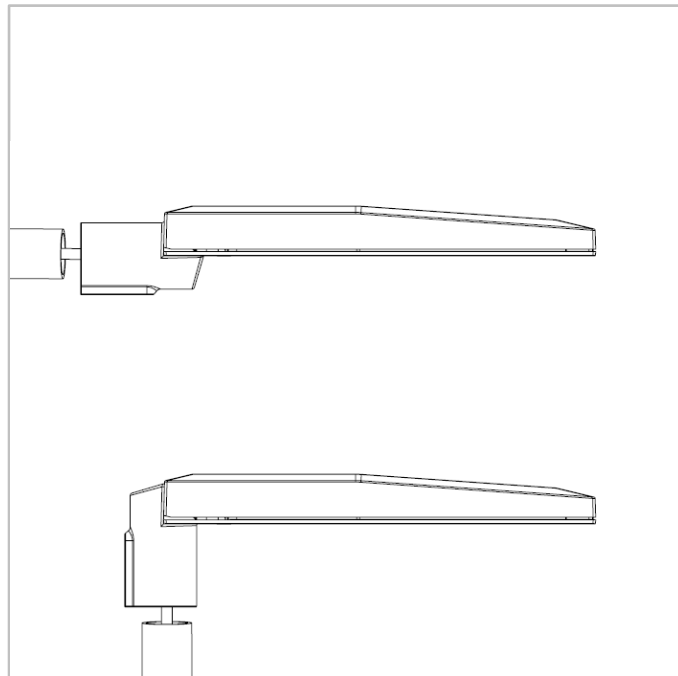
- Dimensions given for NIGHTSTAR with Ø60mm spigot (side-entry mounting)
- Size and weight may be different according to the configuration. Please consult us for more information.



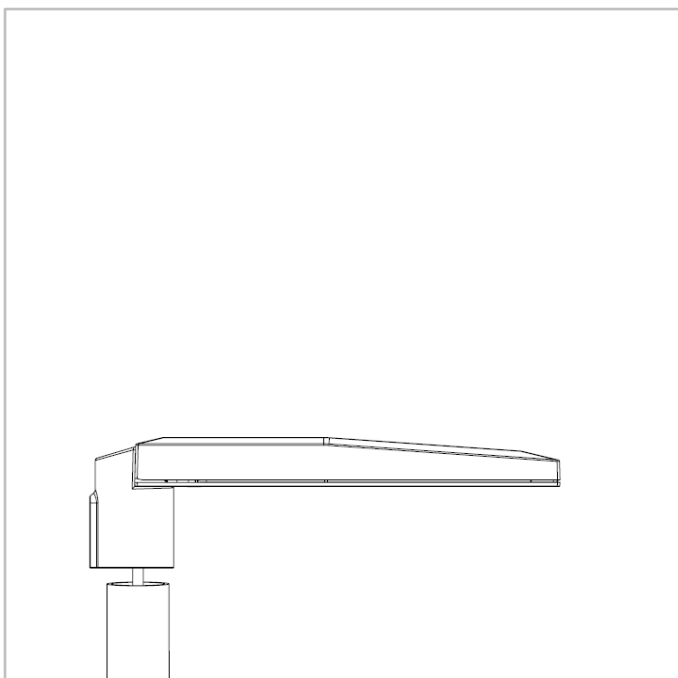
NIGHTSTAR | Side-entry mounting for  
Ø42- 48mm spigot - 2xM10 screws

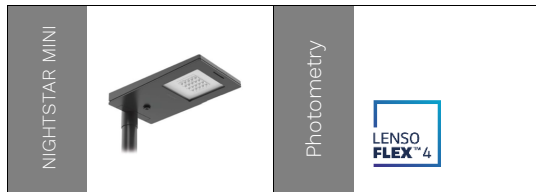


NIGHTSTAR | Side-entry or Post-top mounting  
for Ø60mm spigot - 2xM10 screws



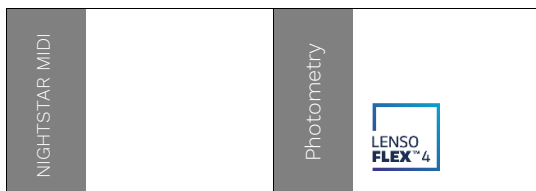
NIGHTSTAR | Post-top mounting for  
Ø76mm spigot - 2xM10 screws





Number of LEDs	Luminaire output flux (lm)												Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White 722		Warm White 727		Warm White 730		Warm White 830		Neutral White 740		Cool White 757				
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
10	600	3000	700	3500	800	3800	700	3600	800	4100	800	4000	7	34	150
20	1200	6100	1400	7100	1600	7700	1500	7300	1700	8200	1600	8000	13	67	165
30	1900	8400	2200	9700	2400	10600	2300	10000	2600	11200	2500	11000	19	82	175
40	2600	8600	3000	10000	3200	10900	3000	10300	3400	11500	3300	11300	24	89	162

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %



Number of LEDs	Luminaire output flux (lm)												Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White 722		Warm White 727		Warm White 730		Warm White 830		Neutral White 740		Cool White 757				
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
40	2600	9500	3000	11000	3200	12000	3100	11300	3400	12700	3400	12400	24	86	179
60	3900	14100	4500	16300	4900	17800	4600	16700	5200	18900	5100	18400	35	130	184
80	3900	14100	4500	16300	4900	17800	4600	16700	5200	18900	5100	18400	35	130	187

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %





Product Code	Description	* Optic	Beam Distribution	Current (mA)	System Power (W)
<b>Side-Entry</b>					
N1S6Z001L23	NSTAR1 23W 830 20L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	350	23
N1S6Z001L46	NSTAR1 46W 830 20L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	700	46
N1S6Z001L67	NSTAR1 67W 830 20L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	1000	67
N1S6Z002L23	NSTAR1 23W 830 20L 5301 D2 PESN7 BLK	5301	NARROW	350	23
N1S6Z002L46	NSTAR1 46W 830 20L 5301 D2 PESN7 BLK	5301	NARROW	700	46
N1S6Z002L67	NSTAR1 67W 830 20L 5301 D2 PESN7 BLK	5301	NARROW	1000	67
N1S6Z003L23	NSTAR1 23W 830 20L 5304 D2 PESN7 BLK	5304	MEDIUM	350	23
N1S6Z003L46	NSTAR1 46W 830 20L 5304 D2 PESN7 BLK	5304	MEDIUM	700	46
N1S6Z003L67	NSTAR1 67W 830 20L 5304 D2 PESN7 BLK	5304	MEDIUM	1000	67
N1S6Z004L23	NSTAR1 23W 830 20L 5308 D2 PESN7 BLK	5308	WIDE	350	23
N1S6Z004L46	NSTAR1 46W 830 20L 5308 D2 PESN7 BLK	5308	WIDE	700	46
N1S6Z004L67	NSTAR1 67W 830 20L 5308 D2 PESN7 BLK	5308	WIDE	1000	67
N1S6Z005L23	NSTAR1 23W 830 20L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	350	23
N1S6Z005L46	NSTAR1 46W 830 20L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	700	46
N1S6Z005L67	NSTAR1 67W 830 20L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	1000	67
N1S6Z001L43	NSTAR1 43W 830 40L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	350	43
N1S6Z001L62	NSTAR1 62W 830 40L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	500	62
N1S6Z001L89	NSTAR1 89W 830 40L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	700	89
N1S6Z002L43	NSTAR1 43W 830 40L 5301 D2 PESN7 BLK	5301	NARROW	350	43
N1S6Z002L62	NSTAR1 62W 830 40L 5301 D2 PESN7 BLK	5301	NARROW	500	62
N1S6Z002L89	NSTAR1 89W 830 40L 5301 D2 PESN7 BLK	5301	NARROW	700	89
N1S6Z003L43	NSTAR1 43W 830 40L 5304 D2 PESN7 BLK	5304	MEDIUM	350	43
N1S6Z003L62	NSTAR1 62W 830 40L 5304 D2 PESN7 BLK	5304	MEDIUM	500	62
N1S6Z003L89	NSTAR1 89W 830 40L 5304 D2 PESN7 BLK	5304	MEDIUM	700	89
N1S6Z004L43	NSTAR1 43W 830 40L 5308 D2 PESN7 BLK	5308	WIDE	350	43
N1S6Z004L62	NSTAR1 62W 830 40L 5308 D2 PESN7 BLK	5308	WIDE	500	62
N1S6Z004L89	NSTAR1 89W 830 40L 5308 D2 PESN7 BLK	5308	WIDE	700	89
N1S6Z005L43	NSTAR1 43W 830 40L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	350	43
N1S6Z005L62	NSTAR1 62W 830 40L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	500	62
N1S6Z005L89	NSTAR1 89W 830 40L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	700	89

### Configuration Options

N1S4	NIGHTSTAR MINI SIDE-ENTRY 42-48
N1S6	NIGHTSTAR MINI SIDE-ENTRY 60
N1P6	NIGHTSTAR MINI POST-TOP 60
N1P7	NIGHTSTAR MINI POST-TOP 76
730/740/830/840	CRI70 3000K / CRI70 4000K / CRI80 3000K / CRI80 4000K
DA or D4	DALI-2 or D4i
PESN7	NEMA with Shorting Cap
PESN7Z	NEMA with Shorting Cap and Zhaga
BLK or GRY	RAL9005T Jet Black Textured Finish or RAL7043T Traffic Grey Textured Finish

\* This is just a selection of the photometrical solutions available. For more information, please visit [www.sylvania-schreder.com](http://www.sylvania-schreder.com) or contact your sales representative.



Product Code	Description	* Optic	Beam Distribution	Current (mA)	System Power (W)
<b>Side-Entry</b>					
N2S6Z001L45	NSTAR2 45W 830 40L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	350	45
N2S6Z001L64	NSTAR2 64W 830 40L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	500	64
N2S6Z001L89	NSTAR2 89W 830 40L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	700	89
N2S6Z002L45	NSTAR2 45W 830 40L 5301 D2 PESN7 BLK	5301	NARROW	350	45
N2S6Z002L64	NSTAR2 64W 830 40L 5301 D2 PESN7 BLK	5301	NARROW	500	64
N2S6Z002L89	NSTAR2 89W 830 40L 5301 D2 PESN7 BLK	5301	NARROW	700	89
N2S6Z003L45	NSTAR2 45W 830 40L 5304 D2 PESN7 BLK	5304	MEDIUM	350	45
N2S6Z003L64	NSTAR2 64W 830 40L 5304 D2 PESN7 BLK	5304	MEDIUM	500	64
N2S6Z003L89	NSTAR2 89W 830 40L 5304 D2 PESN7 BLK	5304	MEDIUM	700	89
N2S6Z004L45	NSTAR2 45W 830 40L 5308 D2 PESN7 BLK	5308	WIDE	350	45
N2S6Z004L64	NSTAR2 64W 830 40L 5308 D2 PESN7 BLK	5308	WIDE	500	64
N2S6Z004L89	NSTAR2 89W 830 40L 5308 D2 PESN7 BLK	5308	WIDE	700	89
N2S6Z005L45	NSTAR2 45W 830 40L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	350	45
N2S6Z005L64	NSTAR2 64W 830 40L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	500	64
N2S6Z005L89	NSTAR2 89W 830 40L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	700	89
N2S6Z001L48	NSTAR2 48W 830 80L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	200	48
N2S6Z001L84	NSTAR2 84W 830 80L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	350	84
N2S6Z001L130	NSTAR2 130W 830 80L 5300 D2 PESN7 BLK	5300	ULTRA NARROW	530	130
N2S6Z002L48	NSTAR2 48W 830 80L 5301 D2 PESN7 BLK	5301	NARROW	200	48
N2S6Z002L84	NSTAR2 84W 830 80L 5301 D2 PESN7 BLK	5301	NARROW	350	84
N2S6Z002L130	NSTAR2 130W 830 80L 5301 D2 PESN7 BLK	5301	NARROW	530	130
N2S6Z003L48	NSTAR2 48W 830 80L 5304 D2 PESN7 BLK	5304	MEDIUM	200	48
N2S6Z003L84	NSTAR2 84W 830 80L 5304 D2 PESN7 BLK	5304	MEDIUM	350	84
N2S6Z003L130	NSTAR2 130W 830 80L 5304 D2 PESN7 BLK	5304	MEDIUM	530	130
N2S6Z004L48	NSTAR2 48W 830 80L 5308 D2 PESN7 BLK	5308	WIDE	200	48
N2S6Z004L84	NSTAR2 84W 830 80L 5308 D2 PESN7 BLK	5308	WIDE	350	84
N2S6Z004L130	NSTAR2 130W 830 80L 5308 D2 PESN7 BLK	5308	WIDE	530	130
N2S6Z005L48	NSTAR2 48W 830 80L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	200	48
N2S6Z005L84	NSTAR2 84W 830 80L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	350	84
N2S6Z005L130	NSTAR2 130W 830 80L 5393 D2 PESN7 BLK	5393	ULTRA WIDE	530	130

### Configuration Options

N2S4	NIGHTSTAR MIDI SIDE-ENTRY 42-48
N2S6	NIGHTSTAR MIDI SIDE-ENTRY 60
N2P6	NIGHTSTAR MIDI POST-TOP 60
N2P7	NIGHTSTAR MIDI POST-TOP 76
730/740/830/840	CRI70 3000K / CRI70 4000K / CRI80 3000K / CRI80 4000K
D2 or D4	DALI-2 or D4i
PESN7	NEMA with Shorting Cap
PESN7Z	NEMA with Shorting Cap and Zhaga
BLK or GRY	RAL9005T Jet Black Textured Finish or RAL7043T Traffic Grey Textured Finish

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