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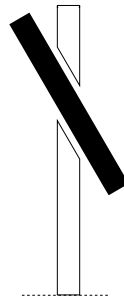
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HOW TO CONFIGURE

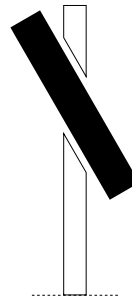
Planning with Nebula modular system is easy. Follow our step by step guide to achieve your desired configuration.

1. Luminaire head types

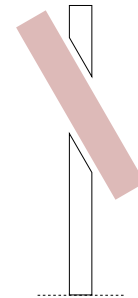
Select luminaire size and decide how many you need for your scheme. Three luminaire head types are available: Nebula Small (S), Nebula Large (L) and Nebula Venezia (V).



Nebula Small
luminaire head
h 3' 0", Ø 4"

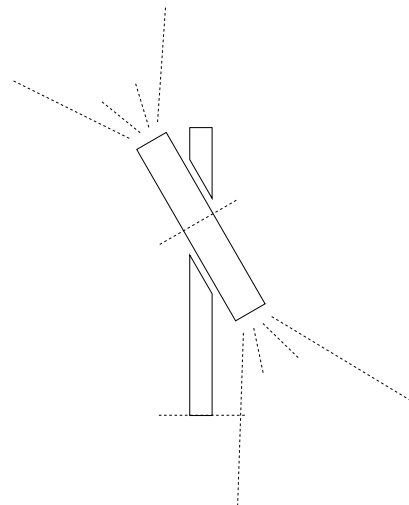


Nebula Large
luminaire head
h 3' 0", Ø 6"



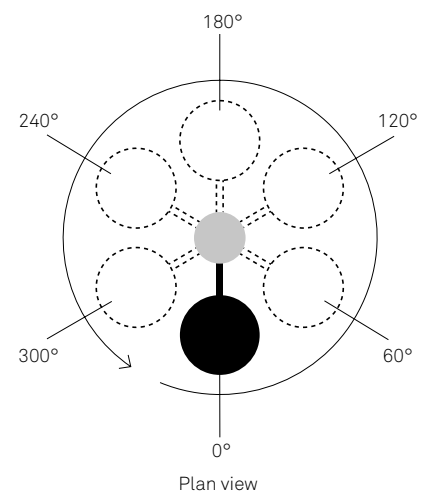
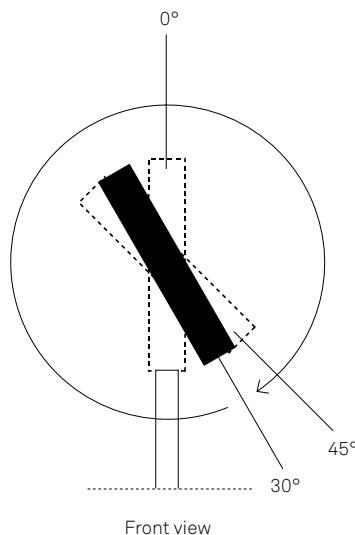
Nebula Venezia
luminaire head
decorative,
transparent rose tint
h 3' 0", Ø 6"

Nebula luminaire heads are composed of two light sources. They can be controlled together or separately. Symmetric and asymmetric distributions as well as beam angles from very narrow (10°) to wide (80°), color temperatures from 2,700K to 4,000K, including Amber and RGBW, are only some of the options to choose from to configure.



2. Arrangement

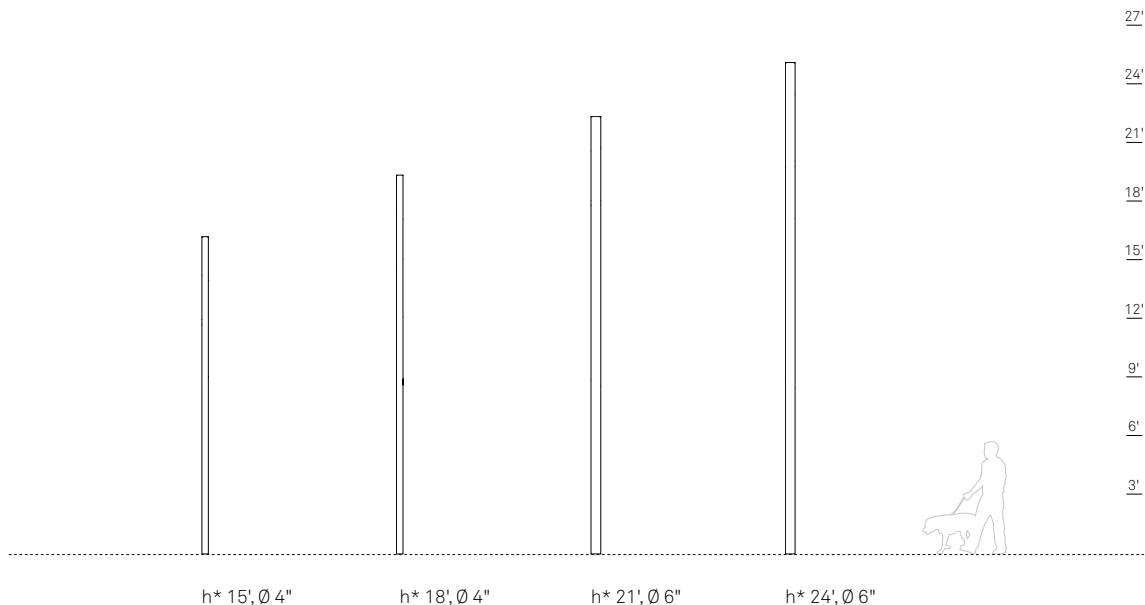
Nebula system luminaire heads can tilt (0°, 30°, 45° or any other angle) and revolve (0° - 120°). Select your preferred tilt and revolving angles.



3. Pole height and diameter

Choose between four standard pole heights and two pole diameters.

* Mounting height of highest luminaire head.

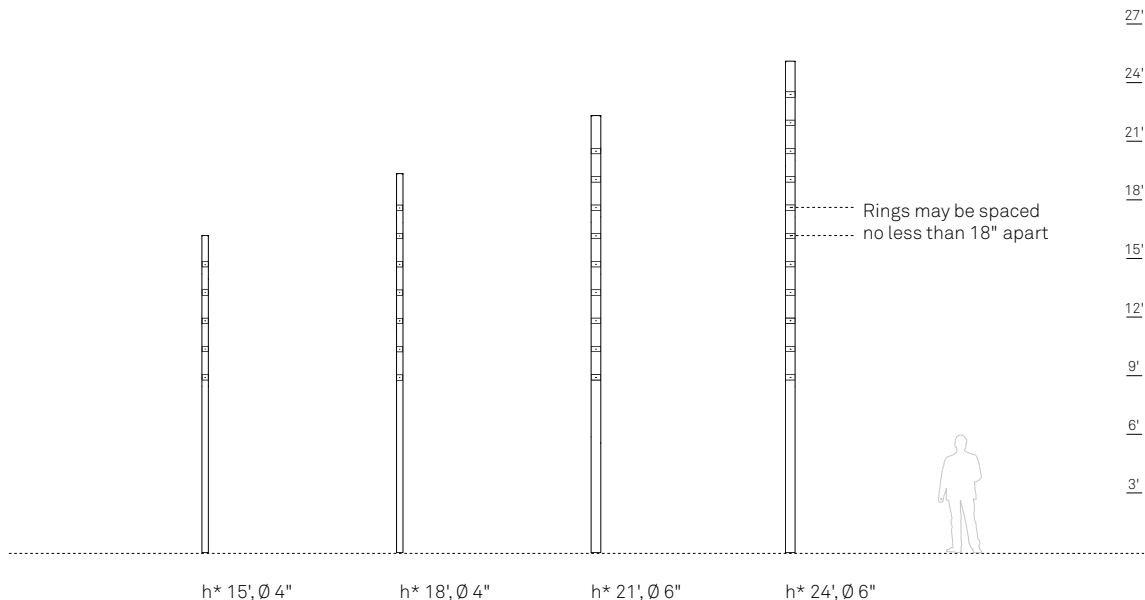


4. Rings

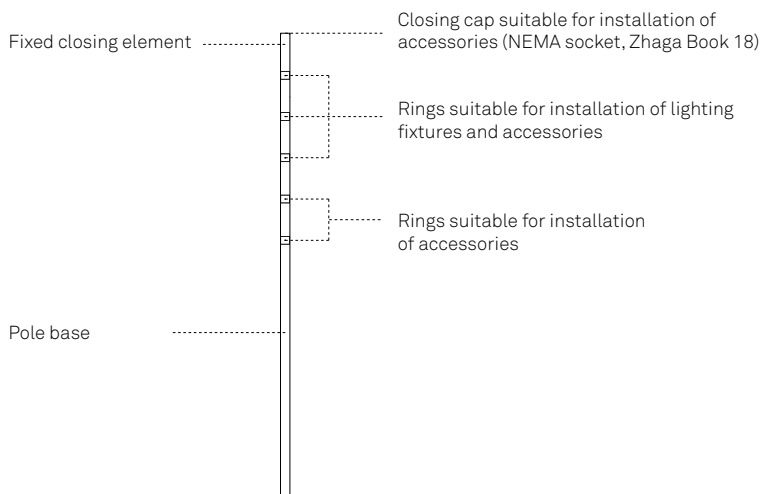
Different heights can accommodate a different number of rings. Rings are the mounting devices designed to hold luminaires or accessories part of the system.

The diagram on the right shows the maximum number of rings per pole. Each ring can accommodate one or two luminaire heads or accessories. Choose the required rings on the specified height and choose type of luminaire head or accessory.

* Mounting height of highest luminaire head.



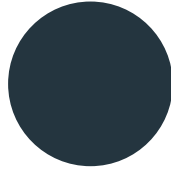
When positioning luminaire heads and accessories on the pole, the lowest 2 rings may be used only for accessories. The rings above these may be used for luminaire heads or accessories.



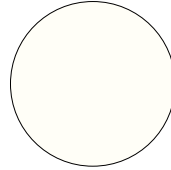
NERI

5. Color

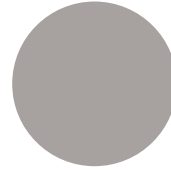
Standard finish for the system is Neri grey.
Other system finishes available are:
pure white, white aluminum, grey
aluminum, jet black, moss green.



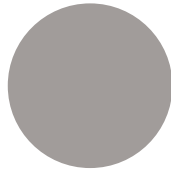
Neri grey



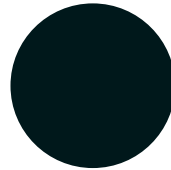
Pure White
RAL 9010



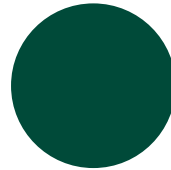
White Aluminum
RAL 9006



Grey Aluminum
RAL 9007

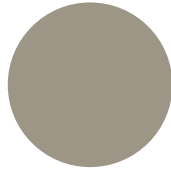


Jet Black
RAL 9005

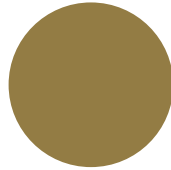


Moss Green
RAL 6005

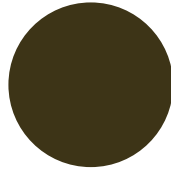
Additional finishes are available for
luminaire heads: silver, gold, bronze,
brown and black anodizing.



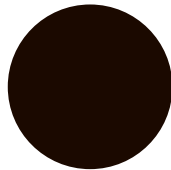
Silver
Anodizing



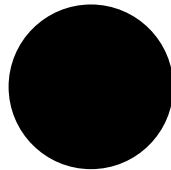
Gold
Anodizing



Bronze
Anodizing



Brown
Anodizing



Black
Anodizing

NEBULA POLES 15'

Conformity

CE certified post, in compliance with UNI EN 40-5.
EPA Rating in accordance with AASHTO 2015 standards.
Basic Wind Speed: 160mph (72 m/sec).

Materials

Steel tubes UNI EN 10219-1, hot galvanized as UNI EN ISO 1461 norm.

Structural elements

Pole in hot galvanized steel, composed by three tubes welded together:
- (A) Tube diam. 4" x 9' 2 2/4".
- (B) Tube diam. 2 1/4" x 7' 1 1/4".
- (C) Tube diam. 1 3/4" x 4" (threaded 1" 1/4 GAS).
- (D) Square flange.

Standard equipment

- Slot (E) (11 3/4" x 2") for installation of terminal board, with or without fuse.
- Hand hole (F) (14 1/4" x 3 1/4") to close the slot for terminal board with the Neri logo on it.
- Hole Ø 3 2/4" at the centre of flange for passage of electric cables.
- Terminal for grounding (bushing M10).

Dimensions and weight

- Height max: 16' 7 2/4".
- Height useful: 16' 3 3/4".
- Weight max: 127.8 lb.

Mounting

- Square Flange (D) 10 2/4" x 10 2/4" (thickness 3/4"), for mounting with 4 anchors bolts to the foundation plinth (anchors and bolts are not supplied).
- We recommend mounting with hidden flange, positioned 4" below the final pavement level.

Protection of surfaces

Please refer to the specific description of the product painting cycles.

Painting

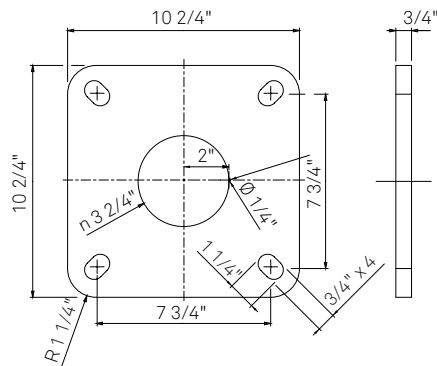
Powder coating:

- neri grey
- pure white
- white aluminum
- grey aluminum
- jet black
- moss green

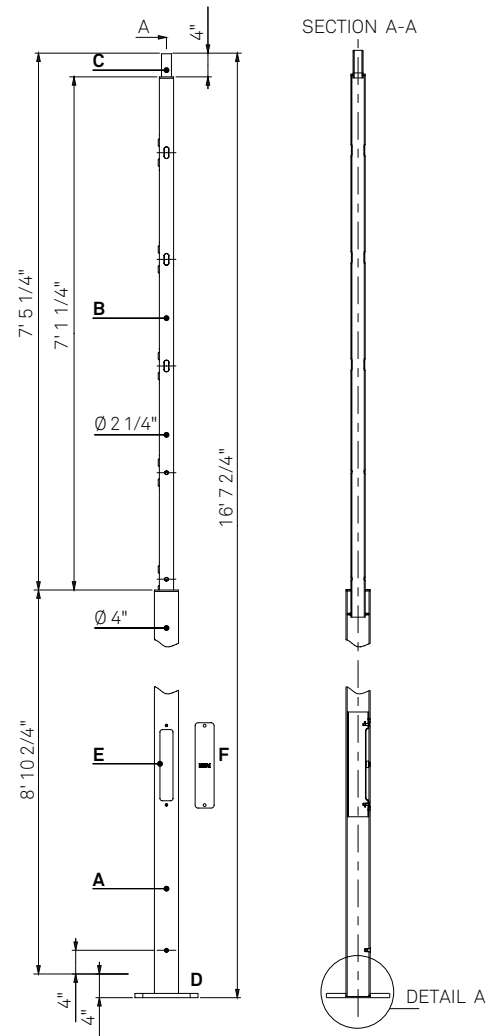
Accessories (on demand)

- Flange cover.
- IP54 kit for hand hole.

DETAIL A - FLANGE PLAN



DRAWINGS



NEBULA POLES 18'

Conformity

CE certified post, in compliance with UNI EN 40-5.
EPA Rating in accordance with AASHTO 2015 standards.
Basic Wind Speed: 160mph (72 m/sec).

Materials

Steel tubes UNI EN 10219-1, hot galvanized as UNI EN ISO 1461 norm.

Structural elements

Pole in hot galvanized steel, composed by three tubes welded together:

- (A) Tube diam. 4" x 9' 2 2/4".
- (B) Tube diam. 2 1/4" x 10' 3/4".
- (C) Tube diam. 1 3/4" x 4" (threaded 1" 1/4 GAS).
- (D) Square flange.

Standard equipment

- Slot (E) (11 3/4" x 2") for installation of terminal board, with or without fuse.
- Hand hole (F) (14 1/4" x 3 1/4") to close the slot for terminal board with the Neri logo on it.
- Hole Ø 3 2/4" at the centre of flange for passage of electric cables.
- Terminal for grounding (bushing M10).

Dimensions and weight

- Height max: 19' 7".
- Height useful: 19' 3".
- Weight max: 143.3 lb.

Mounting

- Square Flange (D) 10 2/4" x 10 2/4" (thickness 3/4"), for mounting with 4 anchors bolts to the foundation plinth (anchors and bolts are not supplied).
- We recommend mounting with hidden flange, positioned 4" below the final pavement level.

Protection of surfaces

Please refer to the specific description of the product painting cycles.

Painting

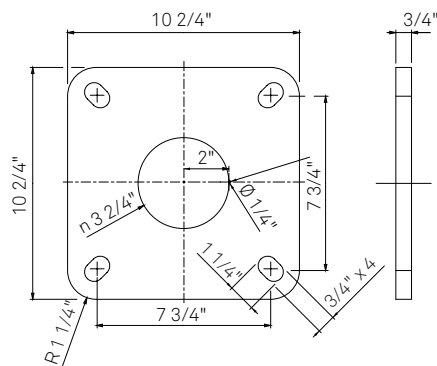
Powder coating:

- neri grey
- pure white
- white aluminum
- grey aluminum
- jet black
- moss green

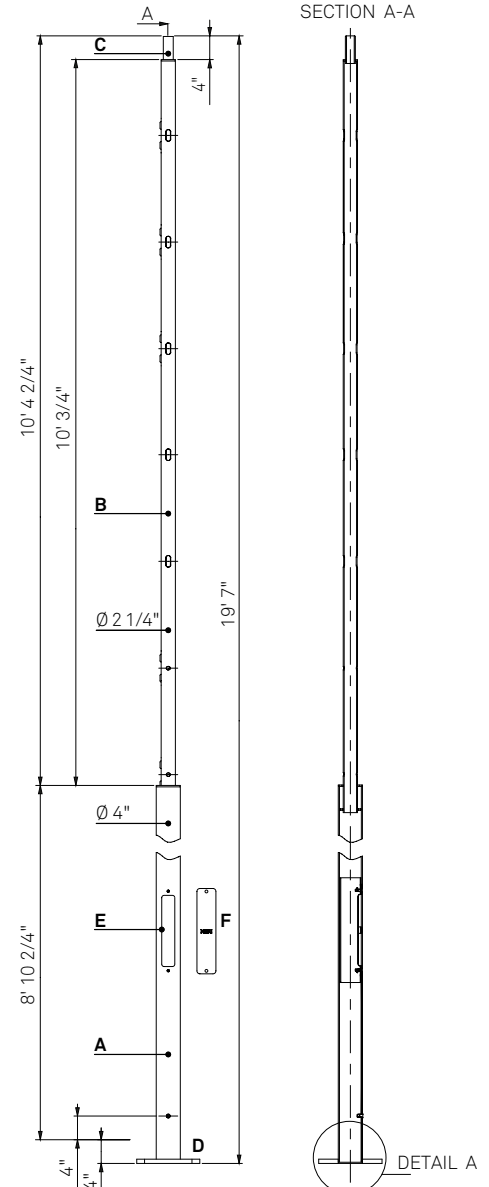
Accessories (on demand)

- Flange cover.
- IP54 kit for hand hole.

DETAIL A - FLANGE PLAN



DRAWINGS



NEBULA POLES 21'

Conformity

CE certified post, in compliance with UNI EN 40-5.
EPA Rating in accordance with AASHTO 2015 standards.
Basic Wind Speed: 160mph (72 m/sec).

Materials

Steel tubes UNI EN 10219-1, hot galvanized as UNI EN ISO 1461 norm.

Structural elements

Pole in hot galvanized steel, composed by three tubes welded together:

- (A) Tube diam. 6" x 9' 2 2/4".
- (B) Tube diam. 4" x 13' 0".
- (C) Tube diam. 1 3/4" x 4" (threaded 1" 1/4 GAS).
- (D) Square flange.

Standard equipment

- Slot (E) (19 3/4" x 3 2/4") for installation of terminal board, with or without fuse.
- Hand hole (F) (22" x 4 3/4") to close the slot for terminal board with the Neri logo on it.
- Hole Ø 5 2/4" at the centre of flange for passage of electric cables.
- Terminal for grounding (bushing M10).

Dimensions and weight

- Height max: 22' 6 2/4".
- Height useful: 22' 2 2/4".
- Weight max: 275.5 lb.

Mounting

- Square Flange (D) 14 2/4" x 14 2/4" (thickness 3/4"), for mounting with 4 anchors bolts to the foundation plinth (anchors and bolts are not supplied).
- We recommend mounting with hidden flange, positioned 4" below the final pavement level.

Protection of surfaces

Please refer to the specific description of the product painting cycles.

Painting

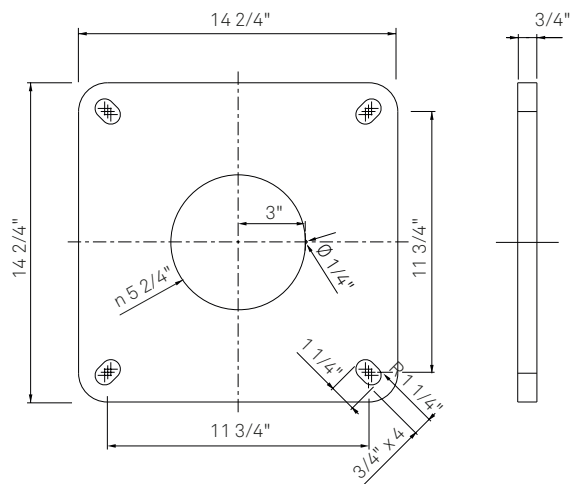
Powder coating:

- neri grey
- pure white
- white aluminum
- grey aluminum
- jet black
- moss green

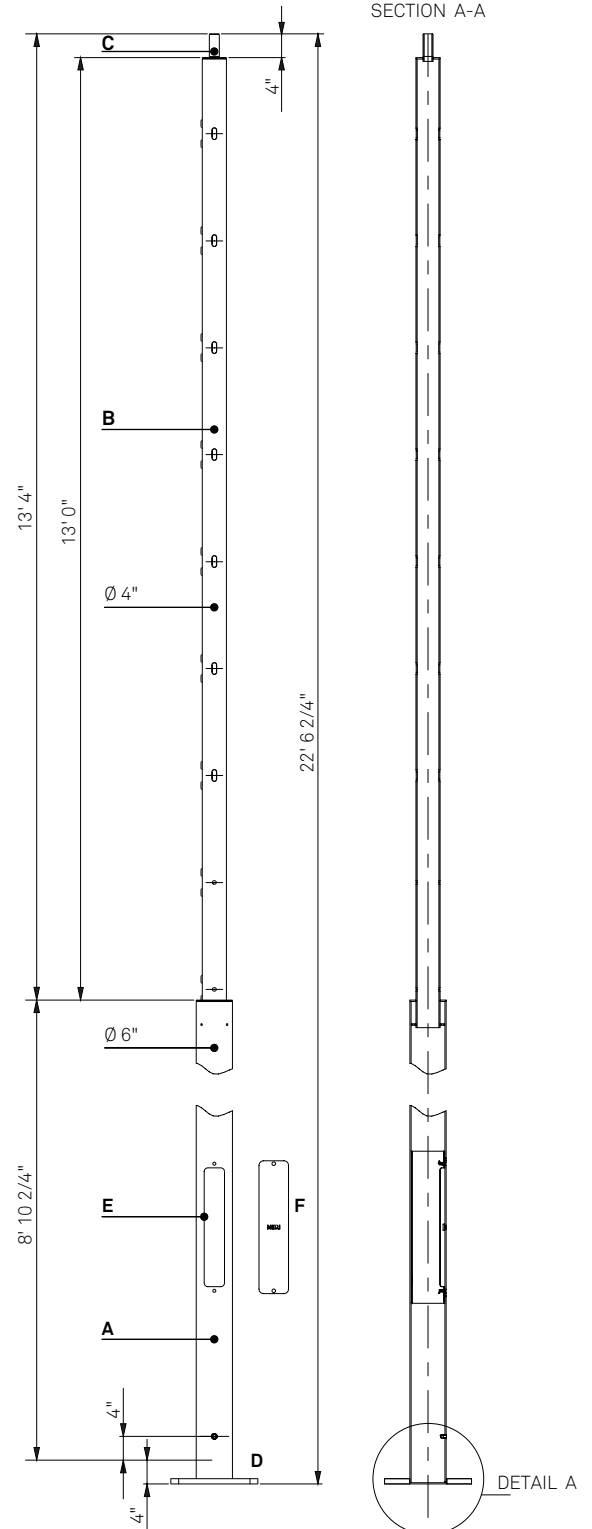
Accessories (on demand)

- Flange cover.
- IP54 kit for hand hole.

DETAIL A - FLANGE PLAN



DRAWINGS



NEBULA POLES 24'

Conformity

CE certified post, in compliance with UNI EN 40-5.
EPA Rating in accordance with AASHTO 2015 standards.
Basic Wind Speed: 160mph (72 m/sec).

Materials

Steel tubes UNI EN 10219-1, hot galvanized as UNI EN ISO 1461 norm.

Structural elements

Pole in hot galvanized steel, composed by three tubes welded together:

- (A) Tube diam. 6" x 9' 2 2/4".
- (B) Tube diam. 4" x 15' 11 2/4".
- (C) Tube diam. 1 3/4" x 4" (threaded 1" 1/4 GAS).
- (D) Square flange.

Standard equipment

- Slot (E) (19 3/4" x 3 2/4") for installation of terminal board, with or without fuse.
- Hand hole (F) (22" x 4 3/4") to close the slot for terminal board with the Neri logo on it.
- Hole Ø 5 2/4" at the centre of flange for passage of electric cables.
- Terminal for grounding (bushing M10).

Dimensions and weight

- Height max: 25' 6".
- Height useful: 25' 2".
- Weight max: 308.6 lb.

Mounting

- Square Flange (D) 14 2/4" x 14 2/4" (thickness 3/4"), for mounting with 4 anchors bolts to the foundation plinth (anchors and bolts are not supplied).
- We recommend mounting with hidden flange, positioned 4" below the final pavement level.

Protection of surfaces

Please refer to the specific description of the product painting cycles.

Painting

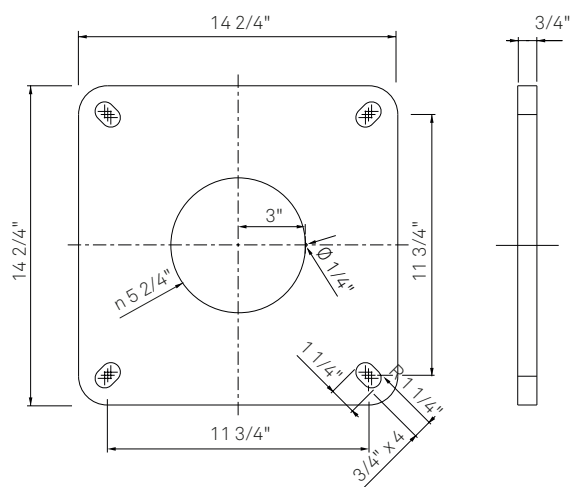
Powder coating:

- neri grey
- pure white
- white aluminum
- grey aluminum
- jet black
- moss green

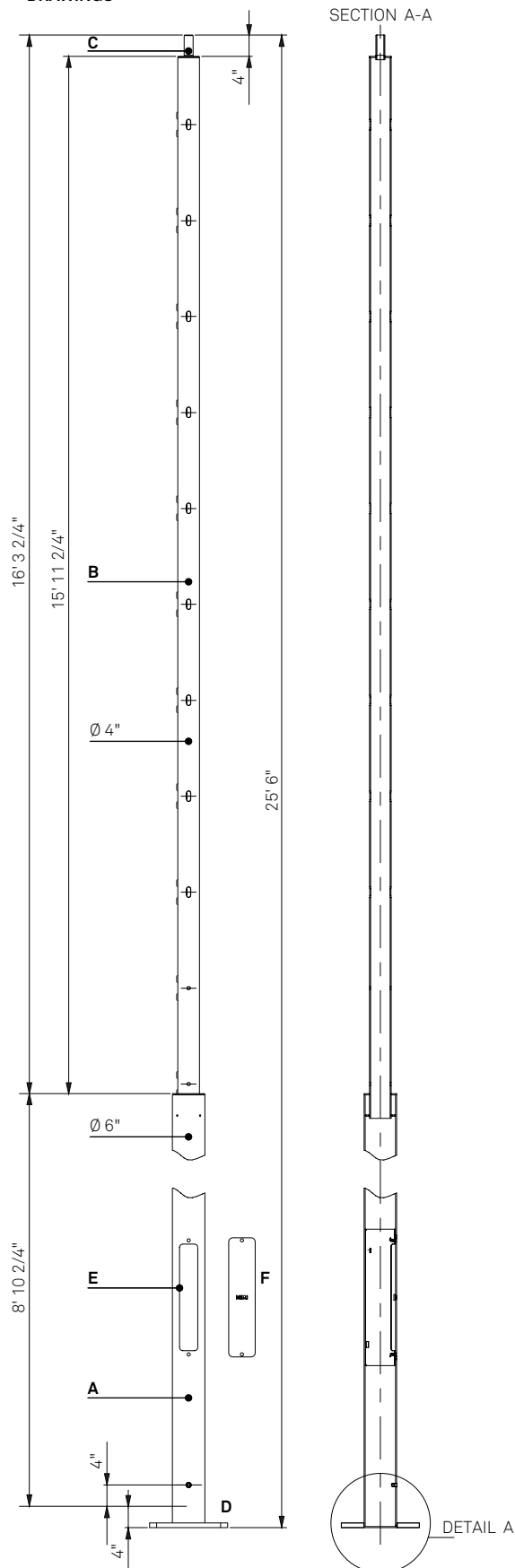
Accessories (on demand)

- Flange cover.
- IP54 kit for hand hole.

DETAIL A - FLANGE PLAN



DRAWINGS



accessories	luminaire	tilt	revolution	left		right	revolution	tilt	luminaire	accessories
			EMPTY		11		120	30	#15	
	#15	30	60		10		EMPTY			
			EMPTY		9		120	30	#15	
	#15	30	60		8		EMPTY			
			EMPTY		7		120	30	#15	
	#15	30	60		6		EMPTY			
			EMPTY		5		EMPTY			
			EMPTY		4		EMPTY			
			EMPTY		3		120			BN
			EMPTY		2		EMPTY			
PT			60		1		EMPTY			

TILT

0°

30°

45°

Front view

REVOLUTION

180°

120°

60°

0°

240°

300°

Hand hole

ACCESSORIES

PLANTER = PT

BANNER HOLDER = BN

accessories	luminaire	tilt	revolution	left		right	revolution	tilt	luminaire	accessories
					5					
					4					
					3					
					2					
					1					

TILT

0°

30°

45°

Front view

REVOLUTION

180°

120°

60°

0°

240°

300°

Hand hole

Fill in this form with the required information to create a summary of your Nebula lamp post configuration. Attached to the summary, fill also in the forms configuring the luminaire heads (see pages 12-13, 19-20, 26, 29-30) and number your luminaire configurations (#1, #2, etc.).

ACCESSORIES

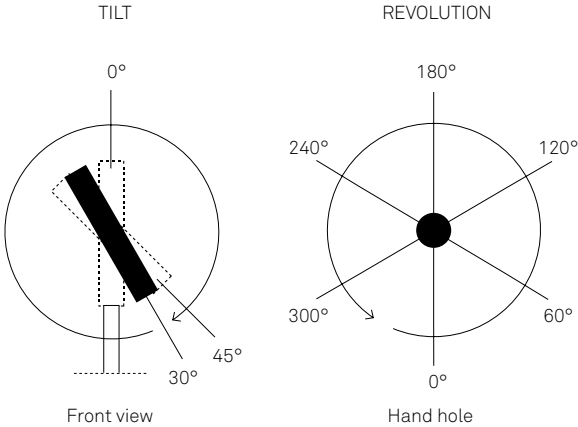
PLANTER = PT
BANNER HOLDER = BN

accessories	luminaire	tilt	revolution	left		right	revolution	tilt	luminaire	accessories
_____	_____	_____	_____		7	_____	_____	_____	_____	_____
_____	_____	_____	_____		6	_____	_____	_____	_____	_____
_____	_____	_____	_____		5	_____	_____	_____	_____	_____
_____	_____	_____	_____		4	_____	_____	_____	_____	_____
_____	_____	_____	_____		3	_____	_____	_____	_____	_____
_____	_____	_____	_____		2	_____	_____	_____	_____	_____
_____	_____	_____	_____		1	_____	_____	_____	_____	_____

Fill in this form with the required information to create a summary of your Nebula lamp post configuration. Attached to the summary, fill also in the forms configuring the luminaire heads (see pages 12-13, 19-20, 26, 29-30) and number your luminaire configurations (#1, #2, etc.).

ACCESSORIES

PLANTER = PT
BANNER HOLDER = BN



accessories	luminaire	tilt	revolution	left		right	revolution	tilt	luminaire	accessories
					9					
					8					
					7					
					6					
					5					
					4					
					3					
					2					
					1					

TILT

0°

30°

45°

Front view

REVOLUTION

180°

120°

60°

0°

240°

300°

Hand hole

Fill in this form with the required information to create a summary of your Nebula lamp post configuration. Attached to the summary, fill also in the forms configurating the luminaire heads (see pages 12-13, 19-20, 26, 29-30) and number your luminaire configurations (#1, #2, etc.).

ACCESSORIES

PLANTER = PT
BANNER HOLDER = BN

accessories	luminaire	tilt	revolution	left	right	revolution	tilt	luminaire	accessories
				11					
				10					
				9					
				8					
				7					
				6					
				5					
				4					
				3					
				2					
				1					

TILT

Front view

REVOLUTION

Hand hole

Fill in this form with the required information to create a summary of your Nebula lamp post configuration. Attached to the summary, fill also in the forms configuring the luminaire heads (see pages 12-13, 19-20, 26, 29-30) and number your luminaire configurations (#1, #2, etc.).

ACCESSORIES

PLANTER = PT
BANNER HOLDER = BN

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA S (4")

Nebula Small luminaire head consists of two sources. Each source can be independently configured. The overview below lists available options.

NEBULA S CONFIGURATION # LUMINAIRE HEAD DOWN LIGHT

Luminaire configuration number to be also written in the lamp post configuration page.

NEBULA S - EMPTY

NEBULA S - ST HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	2,700K	1,000	1-10V	Prismatic flat glass
Type V	3,000K		DALI	
	3,500K			
	4,000K			

NEBULA S - PR COB LED (REFLECTOR, PC)

Optic system	CCT	Lumen output	Driver function	Aperture lens
30° Medium narrow spot	2,700K	1,500	1-10V	Transparent flat glass
60° Medium flood	3,000K	2,500	DALI	
70° Medium wide flood	3,500K			
80° Medium wide flood	4,000K			

NEBULA S - RGBW HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
15° Very narrow spot	RGBW	333 lm (R)	DMX	Transparent flat glass
25° Narrow spot		289 lm (G)		
35° Medium narrow spot		89 lm (B)		
		500 lm (W)		

NEBULA S - A HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	Amber	350 lm (A)	1-10V	Prismatic flat glass
Type V			DALI	

NEBULA S - SNOOT

snoot 30°

snoot 45°

NEBULA S - COLOR

Powder coating	Anodizing
Neri grey	Silver anodizing
Pure white	Gold anodizing
White aluminum	Bronze anodizing
Grey aluminum	Brown anodizing
Jet black	Black anodizing
Moss green	

NEBULA S LUMINAIRE HEAD DOWN LIGHT

ST

PR

RGBW

A

Aperture lens

Transparent flat glass

Prismatic flat glass

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA S (4")

Nebula Small luminaire head consists of two sources. Each source can be independently configured. The overview below lists available options.

UP

NEBULA S CONFIGURATION # LUMINAIRE HEAD UP LIGHT

Luminaire configuration number to be also written in the lamp post configuration page.

NEBULA S - EMPTY

NEBULA S - ST HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	2,700K	1,000	1-10V	Prismatic flat glass
Type V	3,000K		DALI	
	3,500K			
	4,000K			

NEBULA S - PR COB LED (REFLECTOR, PC)

Optic system	CCT	Lumen output	Driver function	Aperture lens
30° Medium narrow spot	2,700K	1,500	1-10V	Transparent flat glass
60° Medium flood	3,000K	2,500	DALI	
70° Medium wide flood	3,500K			
80° Medium wide flood	4,000K			

NEBULA S - RGBW HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
15° Very narrow spot	RGBW	333 lm (R)	DMX	Transparent flat glass
25° Narrow spot		289 lm (G)		
35° Medium narrow spot		89 lm (B)		
		500 lm (W)		

NEBULA S - A HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	Amber	350 lm (A)	1-10V	Prismatic flat glass
Type V			DALI	

NEBULA S - SNOOT

snoot 30°

snoot 45°

NEBULA S - COLOR

Powder coating	Anodizing
Neri grey	Silver anodizing
Pure white	Gold anodizing
White aluminum	Bronze anodizing
Grey aluminum	Brown anodizing
Jet black	Black anodizing
Moss green	

NEBULA S LUMINAIRE HEAD UP LIGHT

ST

PR

RGBW

A

Aperture lens

Transparent flat glass

Prismatic flat glass

NERI

Nebula S

Source	LED
Weight	17,5lb
Height	3' 0"
Diameter	4"
EPA	-

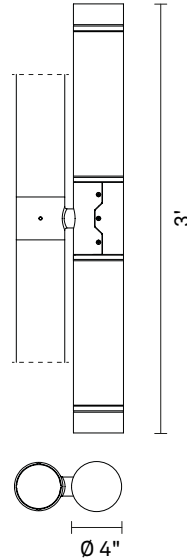
Nebula luminaire heads are composed by two light sources. They can be both switched on or just one.



Compliance:
UL Standard 1598 CSA C22.2 no.250.0-8

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	02/2020



Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Up	Type II	2,700K	350	1-10V	Prismatic flat glass
	Type V	3,000K	500	DALI	Transparent flat glass
	15° Very narrow spot	3,500K	1,000	DMX	
	25° Narrow spot	4,000K	1,500		
	30° Medium narrow spot	RGBW	2,500		
	35° Medium narrow spot	Amber			
	60° Medium flood				
	70° Medium wide flood				
	80° Medium wide flood				
Down	Type II	2,700K	350	1-10V	Prismatic flat glass
	Type V	3,000K	500	DALI	Transparent flat glass
	15° Very narrow spot	3,500K	1,000	DMX	
	25° Narrow spot	4,000K	1,500		
	30° Medium narrow spot	RGBW	2,500		
	35° Medium narrow spot	Amber			
	60° Medium flood				
	70° Medium wide flood				
	80° Medium wide flood				

SPECIFICATIONS:

Construction:

- External frame in extruded aluminum.
- Shield in extra-clear transparent or prismatic tempered glass.
- Integrated heat sink in aluminum.
- Wiring plate in galvanized steel sheet.
- Osmotic valve to balance internal/external pressure.
- Dedicated space for any surge protection devices or remote control systems.

Materials:

- Extruded aluminum.
- Galvanized steel.
- Extra clear transparent or prismatic tempered flat glass.
- Stainless steel fasteners.

Finish:

- Powder coating or anodizing.
- Powder coating:
Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- Anodizing:
silver anodizing, gold anodizing, bronze anodizing, brown anodizing, black anodizing.
- Information about paint steps used on this product in specific technical sheet.

Fixing:

- Fixing by two headless screws M6 lock nuts with stainless steel.
- Central frame with a tilting system of $\pm 45^\circ$.

Operation and maintenance:

- Please refer to the installation and maintenance manual of the product.
- It is responsibility of the installer the correct installation and electric connection in accordance with applicable regulations.

TECHNICAL DATA:

Electrical and Optical features::

- Voltage: 120-277V (universal).
- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: $-31^\circ\text{F}/+95^\circ\text{F}$.
- Lumen output: from 350 to 2,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber

- Color Rendering Index: CRI > 80 (70 and 90 on demand).
- Electronic power supply with protection against short circuits, overheating and power surges.
- Standard surge protection for differential/common mode up to 10kV/10kV.

DRIVER FUNCTIONS:

Description

1-10 (Analogic control)

DALI (Digital control)

DMX

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA S - ST

Prismatic flat glass - High Power LED
(Single Lens, PMMA).

2,700K

lm tot	W tot	lm/W
1,000	15.00	67

3,000K

lm tot	W tot	lm/W
1,000	14.5	69

3,500K

lm tot	W tot	lm/W
1,000	14.5	69

4,000K

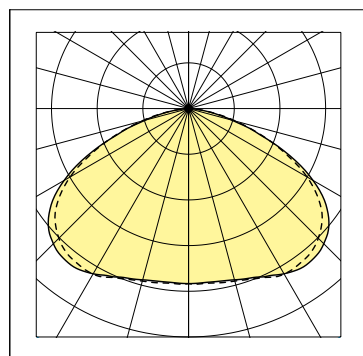
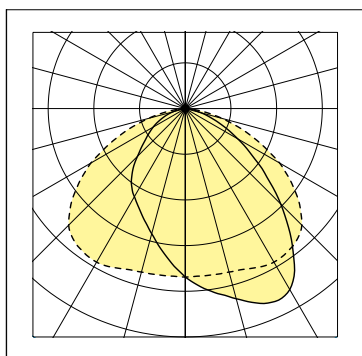
lm tot	W tot	lm/W
1,000	14.0	71

Type II

Prismatic flat glass

Type V

Prismatic flat glass



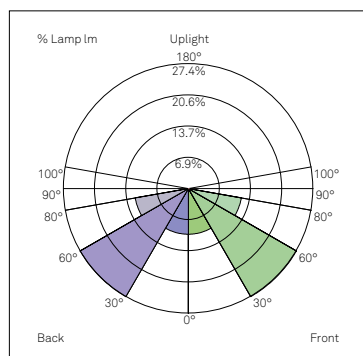
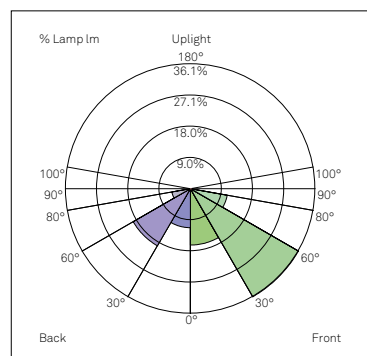
LOR 100%

Full Cutoff



LOR 100%

Full Cutoff



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	16.3	16.3
FM	30° - 60°	36.1	36.1
FH	60° - 80°	10.8	10.8
FVH	80° - 90°	0.7	0.7
BL	0° - 30°	11.3	11.3
BM	30° - 60°	19.1	19.1
BH	60° - 80°	5.4	5.4
BVH	80° - 90°	0.3	0.3
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U1 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	10.0	10.0
FM	30° - 60°	27.4	27.4
FH	60° - 80°	11.8	11.8
FVH	80° - 90°	0.7	0.7
BL	0° - 30°	10.0	10.0
BM	30° - 60°	27.4	27.4
BH	60° - 80°	11.8	11.8
BVH	80° - 90°	0.7	0.7
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U1 G0

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA S - PR

Trasparent flat glass - COB LED
(Reflector, Silicone).

2,700K

lm tot	W tot	lm/W
1,500	14.1	106
2,500	24.2	103

3,000K

lm tot	W tot	lm/W
1,500	14.0	107
2,500	23.9	105

3,500K

lm tot	W tot	lm/W
1,500	13.3	113
2,500	22.8	110

4,000K

lm tot	W tot	lm/W
1,500	12.7	119
2,500	21.8	115

30° Medium narrow spot

Transparent flat glass

60° Medium flood

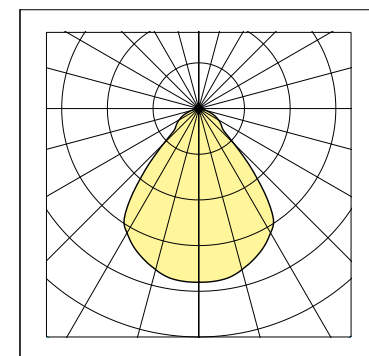
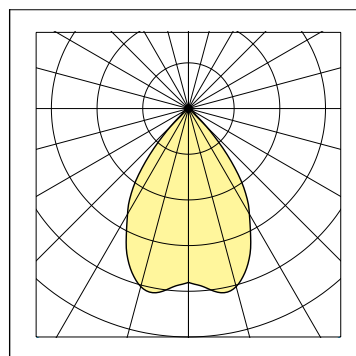
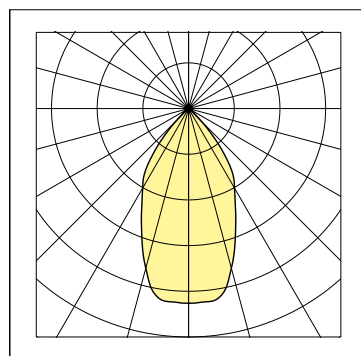
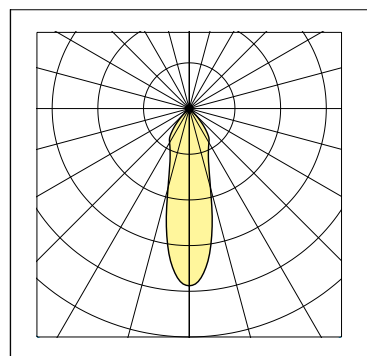
Transparent flat glass

70° Medium wide flood

Transparent flat glass

80° Medium wide flood

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 5x5



LOR 100%
Full Cutoff
NEMA class 5x5



LOR 100%
Full Cutoff
NEMA class 5x5



LOR 100%
Full Cutoff
NEMA class 7x7



Light Beam Table - 30°, 1,500 lm

h (ft)	Eav (fc)	D (ft)
12	13	6.07
16	7	8.10
20	5	10.12

Light Beam Table - 60°, 1,500 lm

h (ft)	Eav (fc)	D (ft)
12	6	12.97
16	3	17.30
20	2	21.62

Light Beam Table - 70°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	4	17.08
16	2	22.74
20	1	28.43

Light Beam Table - 80°, 1,500 lm

h (ft)	Eav (fc)	D (ft)
12	3	20.42
16	1	27.23
20	1	34.04

Light Beam Table - 30°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	21	6.07
16	18	8.10
20	8	10.12

Light Beam Table - 60°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	10	12.97
16	6	17.30
20	4	21.62

Light Beam Table - 70°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	7	17.06
16	4	22.74
20	2	28.43

Light Beam Table - 80°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	4	20.42
16	2	27.23
20	2	34.04

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA S - RGBW

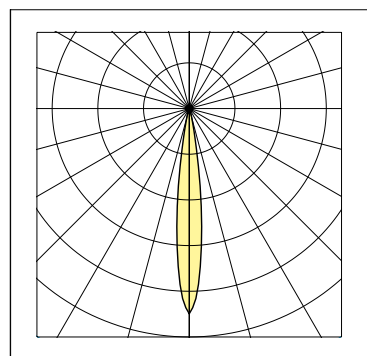
Transparent flat glass - High Power LED
(Single Lens, PMMA).

RGBW

Color	lm	λ (nm)
Red	333 (R)	623
Green	289 (G)	517
Blu	89 (B)	455
White	500 (W)	-

15° Very narrow spot

Transparent flat glass

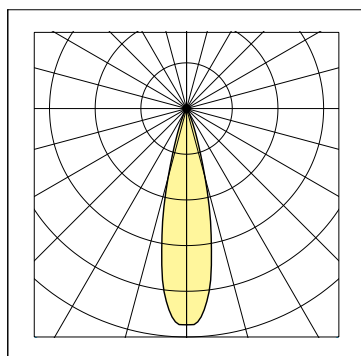


LOR 100%
Full Cutoff
NEMA class 2x2



25° Narrow spot

Transparent flat glass

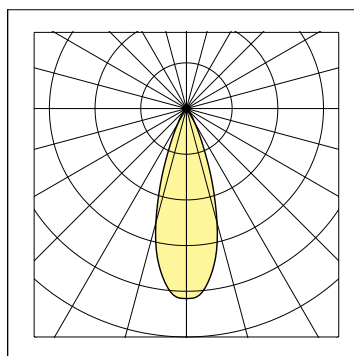


LOR 100%
Full Cutoff
NEMA class 3x3



35° Medium narrow spot

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 4x4



NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA S - A

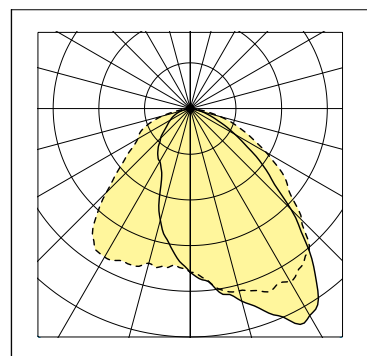
Prismatic flat glass - High Power LED
(Single Lens, PMMA).

Amber

Color	lm	λ (nm)
Amber	350	598

Type II

Prismatic flat glass



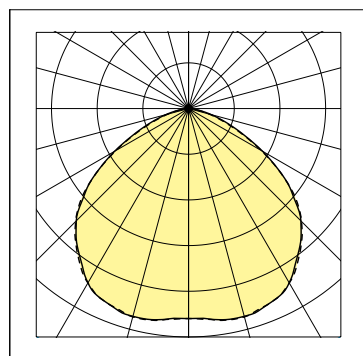
LOR 100%

Full Cutoff



Type V

Prismatic flat glass



LOR 100%

Full Cutoff



NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA L (6")

Nebula Large luminaire head consists of two sources. Each source can be independently configured. The overview below lists available options.

NEBULA L CONFIGURATION # LUMINAIRE HEAD DOWN LIGHT

Luminaire configuration number to be also written in the lamp post configuration page.

NEBULA L - EMPTY

NEBULA L - ST COB LED (SINGLE LENS, SILICONE)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	2,700K	2,500	1-10V	Prismatic flat glass
Type IV	3,000K	3,500	DALI	
Type V	3,500K	4,500		
	4,000K			

NEBULA L - PR COB LED (REFLECTOR, PC)

Optic system	CCT	Lumen output	Driver function	Aperture lens
10° Very narrow spot	2,700K	2,500	1-10V	Transparent flat glass
20° Narrow spot	3,000K	3,500	DALI	
35° Medium narrow spot	3,500K	4,500		
70° Medium wide flood	4,000K			

NEBULA L - RGBW HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
15° Very narrow spot	RGBW	666 lm (R)	DMX	Transparent flat glass
25° Narrow spot		578 lm (G)		
35° Medium narrow spot		178 lm (B)		
		1,000 lm (W)		

NEBULA L - A HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	Amber	700 lm (A)	1-10V	Prismatic flat glass
Type V			DALI	

NEBULA L - SNOOT

snoot 30°

snoot 45°

NEBULA L - COLOR

Powder coating	Anodizing
Neri grey	Silver anodizing
Pure white	Gold anodizing
White aluminum	Bronze anodizing
Grey aluminum	Brown anodizing
Jet black	Black anodizing
Moss green	

NEBULA L LUMINAIRE HEAD DOWN LIGHT

ST

PR

RGBW

A

Aperture lens

Transparent flat
glass

Prismatic flat
glass



DOWN

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA L (6")

Nebula Large luminaire head consists of two sources. Each source can be independently configured. The overview below lists available options.

NEBULA L CONFIGURATION # LUMINAIRE HEAD UP LIGHT

Luminaire configuration number to be also written in the lamp post configuration page.

UP

NEBULA L - EMPTY

NEBULA L - ST COB LED (SINGLE LENS, SILICONE)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	2,700K	2,500	1-10V	Prismatic flat glass
Type IV	3,000K	3,500	DALI	
Type V	3,500K	4,500		
	4,000K			

NEBULA L - PR COB LED (REFLECTOR, PC)

Optic system	CCT	Lumen output	Driver function	Aperture lens
10° Very narrow spot	2,700K	2,500	1-10V	Transparent flat glass
20° Narrow spot	3,000K	3,500	DALI	
35° Medium narrow spot	3,500K	4,500		
70° Medium wide flood	4,000K			

NEBULA L - RGBW HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
15° Very narrow spot	RGBW	666 lm (R)	DMX	Transparent flat glass
25° Narrow spot		578 lm (G)		
35° Medium narrow spot		178 lm (B)		
		1,000 lm (W)		

NEBULA L - A HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	Amber	700 lm (A)	1-10V	Prismatic flat glass
Type V			DALI	

NEBULA L - SNOOT

snoot 30°

snoot 45°

NEBULA L - COLOR

Powder coating	Anodizing
Neri grey	Silver anodizing
Pure white	Gold anodizing
White aluminum	Bronze anodizing
Grey aluminum	Brown anodizing
Jet black	Black anodizing
Moss green	

NEBULA L LUMINAIRE HEAD UP LIGHT

ST

PR

RGBW

A

Aperture lens

Transparent flat glass

Prismatic flat glass

NERI

Nebula L

Source	LED
Weight	26,4lb
Height	3' 0"
Diameter	6"
EPA	-

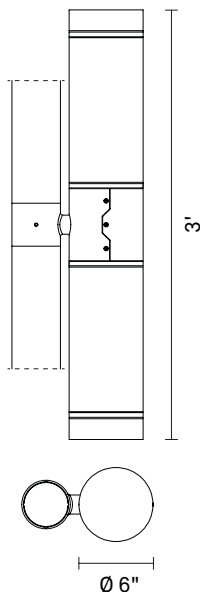
Nebula luminaire heads are composed by two light sources. They can be both switched on or just one.



Compliance:
UL Standard 1598 CSA C22.2 no.250.0-8

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	02/2020



Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Up	Type II	2,700K	700	1-10V	Prismatic flat glass
	Type IV	3,000K	1,000	DALI	Transparent flat glass
	Type V	3,500K	2,500	DMX	
	10° Very narrow spot	4,000K	3,500		
	15° Very narrow spot	RGBW	4,500		
	20° Narrow spot	Amber			
	25° Narrow spot				
	35° Medium narrow spot				
	70° Medium wide flood				
Down	Type II	2,700K	700	1-10V	Prismatic flat glass
	Type IV	3,000K	1,000	DALI	Transparent flat glass
	Type V	3,500K	2,500	DMX	
	10° Very narrow spot	4,000K	3,500		
	15° Very narrow spot	RGBW	4,500		
	20° Narrow spot	Amber			
	25° Narrow spot				
	35° Medium narrow spot				
	70° Medium wide flood				

SPECIFICATIONS:

Construction:

- External frame in extruded aluminum.
- Shield in extra-clear transparent or prismatic tempered glass.
- Integrated heat sink in aluminum.
- Wiring plate in galvanized steel sheet.
- Osmotic valve to balance internal/external pressure.
- Dedicated space for any surge protection devices or remote control systems.

Materials:

- Extruded aluminum.
- Galvanized steel.
- Extra clear transparent or prismatic tempered flat glass.
- Stainless steel fasteners.

Finish:

- Powder coating or anodizing.
- Powder coating:
Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- Anodizing:
silver anodizing, gold anodizing, bronze anodizing, brown anodizing, black anodizing.
- Information about paint steps used on this product in specific technical sheet.

Fixing:

- Fixing by two headless screws M6 lock nuts with stainless steel.
- Central frame with a tilting system of $\pm 45^\circ$.

Operation and maintenance:

- Please refer to the installation and maintenance manual of the product.
- It is responsibility of the installer the correct installation and electric connection in accordance with applicable regulations.

TECHNICAL DATA:

Electrical and Optical features::

- Voltage: 120-277V (universal).
- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: $-31^\circ\text{F}/+95^\circ\text{F}$.
- Lumen output: from 700 to 4,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber

- Color Rendering Index: CRI > 80 (70 and 90 on demand).
- Electronic power supply with protection against short circuits, overheating and power surges.
- Standard surge protection for differential/common mode up to 10kV/10kV.

DRIVER FUNCTIONS:

Description

1-10 (Analogic control)

DALI (Digital control)

DMX

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA L - ST

Prismatic flat glass - COB LED
(Single Lens, Silicone).

2,700K

lm tot	W tot	lm/W
2,500	25.2	99
3,500	36.1	97
4,500	47.1	96

3,000K

lm tot	W tot	lm/W
2,500	24.6	101
3,500	35.1	100
4,500	45.8	98

3,500K

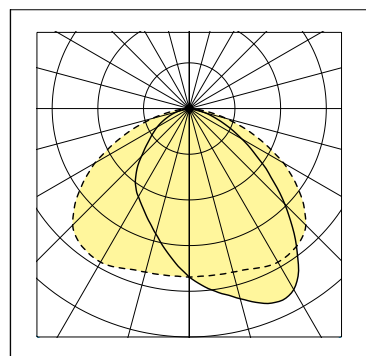
lm tot	W tot	lm/W
2,500	25.5	98
3,500	33.8	103
4,500	44.3	101

4,000K

lm tot	W tot	lm/W
2,500	22.8	110
3,500	32.4	108
4,500	42.7	105

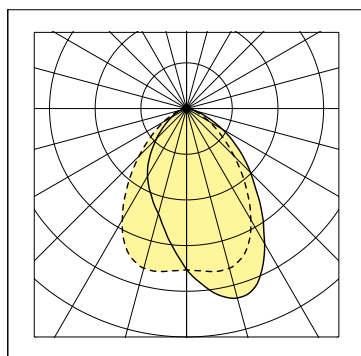
Type II

Prismatic flat glass



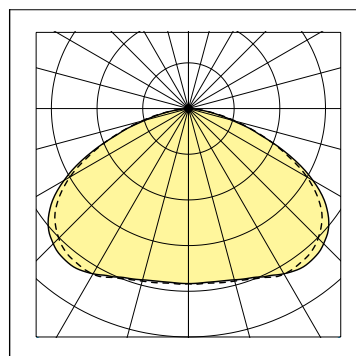
Type IV

Prismatic flat glass



Type V

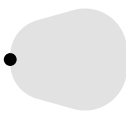
Prismatic flat glass



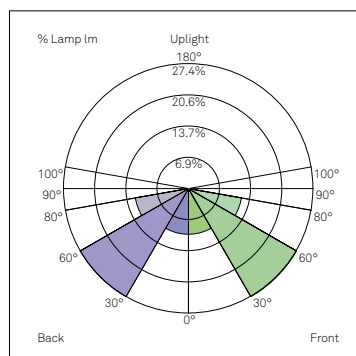
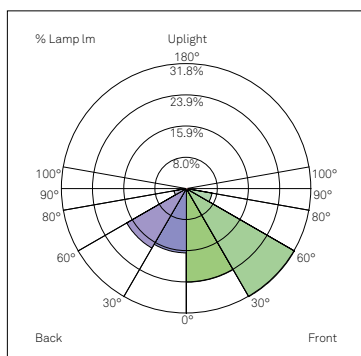
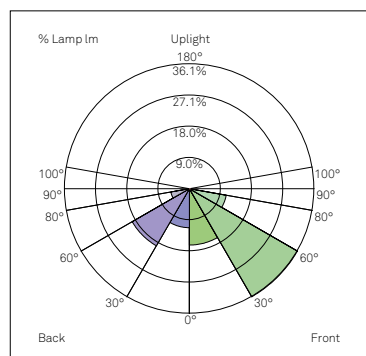
LOR 100%
Full Cutoff



LOR 100%
Full Cutoff



LOR 100%
Full Cutoff



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	16.3	16.3
FM	30° - 60°	36.1	36.1
FH	60° - 80°	10.8	10.8
FVH	80° - 90°	0.7	0.7
BL	0° - 30°	11.3	11.3
BM	30° - 60°	19.1	19.1
BH	60° - 80°	5.4	5.4
BVH	80° - 90°	0.3	0.3
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

2,500lm - BUG: B1 U1 G1
3,500lm - BUG: B1 U1 G1
4,500lm - BUG: B2 U1 G1

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	23.9	23.9
FM	30° - 60°	31.8	31.8
FH	60° - 80°	6.7	6.7
FVH	80° - 90°	0.3	0.3
BL	0° - 30°	16.4	16.4
BM	30° - 60°	17.5	17.5
BH	60° - 80°	3.2	3.2
BVH	80° - 90°	0.2	0.3
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

2,500lm - BUG: B1 U0 G0
3,500lm - BUG: B2 U1 G1
4,500lm - BUG: B2 U1 G1

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	10.0	10.0
FM	30° - 60°	27.4	27.4
FH	60° - 80°	11.8	11.8
FVH	80° - 90°	0.7	0.7
BL	0° - 30°	10.0	10.0
BM	30° - 60°	27.4	27.4
BH	60° - 80°	11.8	11.8
BVH	80° - 90°	0.7	0.7
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

2,500lm - BUG: B1 U1 G1
3,500lm - BUG: B1 U1 G1
4,500lm - BUG: B2 U1 G1

NERI

NEBULA L - PR

Transparent flat glass - COB LED
(Reflector, Silicone).

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

2,700K

lm tot	W tot	lm/W
2,500	25.1	100
3,500	36.2	97
4,500	47.7	94

3,000K

lm tot	W tot	lm/W
2,500	24.8	101
3,500	36.2	99
4,500	46.2	97

3,500K

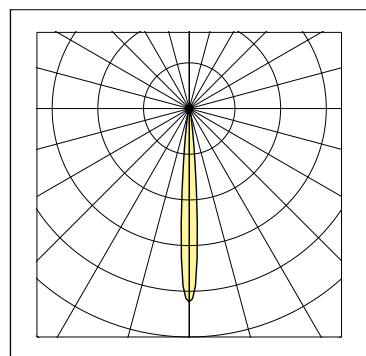
lm tot	W tot	lm/W
2,500	23.7	105
3,500	34.4	102
4,500	44.6	101

4,000K

lm tot	W tot	lm/W
2,500	22.6	111
3,500	32.5	108
4,500	43.0	105

10° Very narrow spot

Transparent flat glass

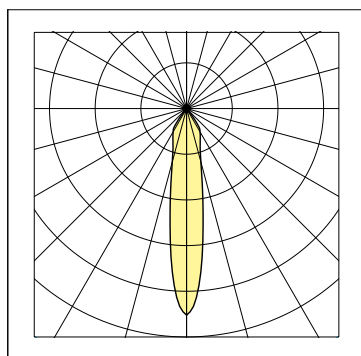


LOR 100%
Full Cutoff
NEMA class 2x2



20° Narrow spot

Transparent flat glass

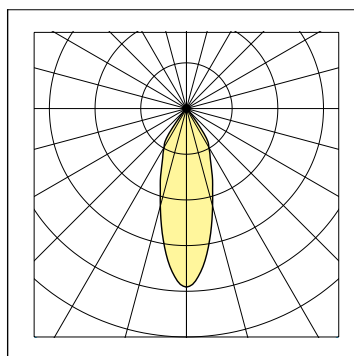


LOR 100%
Full Cutoff
NEMA class 4x4



35° Medium narrow spot

Transparent flat glass

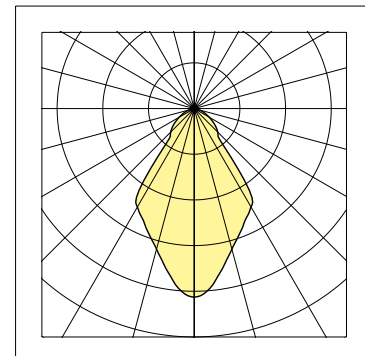


LOR 100%
Full Cutoff
NEMA class 5x5



70° Medium wide flood

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 6x6



Light Beam Table - 10°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	196	1.91
16	110	2.55
20	70	3.19

Light Beam Table - 20°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	39	3.88
16	22	5.17
20	14	6.47

Light Beam Table - 35°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	20	7.37
16	11	9.82
20	7	12.28

Light Beam Table - 70°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	6	16.43
16	3	21.90
20	2	27.38

Light Beam Table - 10°, 3,500 lm

h (ft)	Eav (fc)	D (ft)
12	274	1.91
16	154	2.55
20	99	3.19

Light Beam Table - 20°, 3,500 lm

h (ft)	Eav (fc)	D (ft)
12	55	3.88
16	31	5.17
20	20	6.47

Light Beam Table - 35°, 3,500 lm

h (ft)	Eav (fc)	D (ft)
12	28	7.37
16	16	9.82
20	10	12.28

Light Beam Table - 70°, 3,500 lm

h (ft)	Eav (fc)	D (ft)
12	9	16.43
16	5	21.90
20	3	27.38

Light Beam Table - 10°, 4,500 lm

h (ft)	Eav (fc)	D (ft)
12	352	1.91
16	198	2.55
20	127	3.19

Light Beam Table - 20°, 4,500 lm

h (ft)	Eav (fc)	D (ft)
12	71	3.88
16	40	5.17
20	26	6.47

Light Beam Table - 35°, 4,500 lm

h (ft)	Eav (fc)	D (ft)
12	36	7.37
16	20	9.82
20	13	12.28

Light Beam Table - 70°, 4,500 lm

h (ft)	Eav (fc)	D (ft)
12	11	16.43
16	6	21.90
20	4	27.38

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA L - RGBW

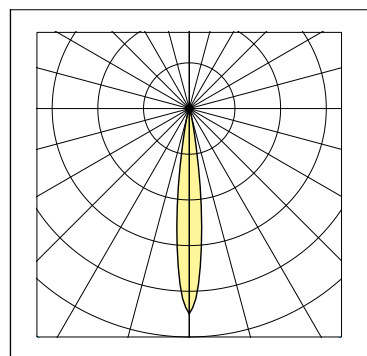
Transparent flat glass - High Power LED
(Single Lens, PMMA).

RGBW

Color	lm	λ (nm)
Red	666 (R)	623
Green	578 (G)	517
Blu	178 (B)	455
White	1,000 (W)	-

15° Very narrow spot

Transparent flat glass

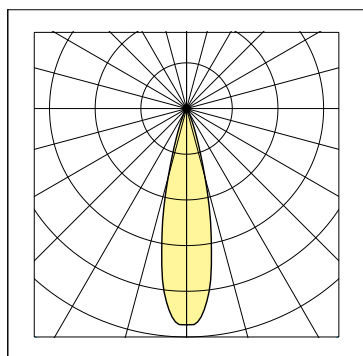


LOR 100%
Full Cutoff
NEMA class 2x2



25° Narrow spot

Transparent flat glass

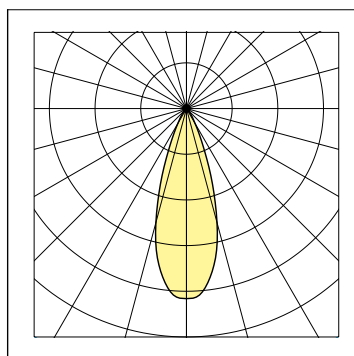


LOR 100%
Full Cutoff
NEMA class 3x3



35° Medium narrow spot

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 4x4



NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA L - A

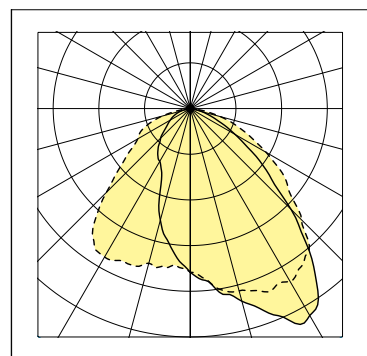
Prismatic flat glass - High Power LED
(Single Lens, PMMA).

Amber

Color	lm	λ (nm)
Amber	700	598

Type II

Prismatic flat glass



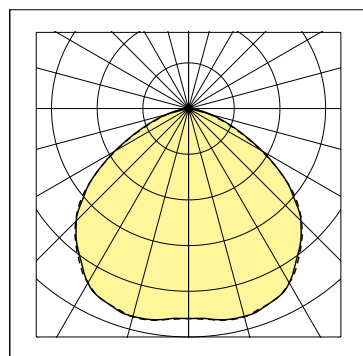
LOR 100%

Full Cutoff



Type V

Prismatic flat glass



LOR 100%

Full Cutoff



NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA V (6")

Nebula Venice luminaire head consists of two sources. Each source can be independently configured. The overview below lists available options.

NEBULA V CONFIGURATION # LUMINAIRE HEAD DOWN LIGHT

Luminaire configuration number to be also written in the lamp post configuration page.

NEBULA V - ST HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	2,700K	1,000	1-10V	Prismatic flat glass
Type V	3,000K		DALI	
	3,500K			
	4,000K			

NEBULA V - PR COB LED (REFLECTOR, PC)

Optic system	CCT	Lumen output	Driver function	Aperture lens
30° Medium narrow spot	2,700K	1,500	1-10V	Transparent flat glass
60° Medium flood	3,000K	2,500	DALI	
70° Medium wide flood	3,500K			
80° Medium wide flood	4,000K			



DOWN

NEBULA V LUMINAIRE HEAD DOWN LIGHT

ST

PR

Aperture lens

Transparent flat
glass

NERI

Nebula V

Source	LED
Weight	19,84lb
Height	3' 0"
Diameter	6"
EPA	-

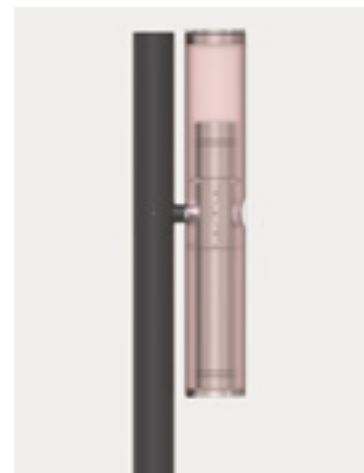
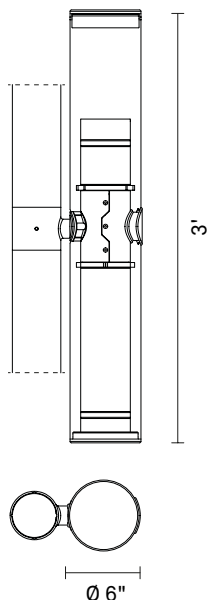
Nebula luminaire heads are composed by two light sources. They can be both switched on or just one.



Compliance:
UL Standard 1598 CSA C22.2 no.250.0-8

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	02/2020



Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Up	Decorative Light				
Down	Type II	2,700K	1,000	1-10V	Prismatic flat glass
	Type V	3,000K	1,500	DALI	Transparent flat glass
	30° Medium narrow spot	3,500K	2,500		
	60° Medium flood	4,000K			
	70° Medium wide flood				
	80° Medium wide flood				

SPECIFICATIONS:

Construction:

- External frame in extruded aluminum.
- Shield in extra-clear transparent or prismatic tempered glass.
- Integrated heat sink in aluminum.
- Wiring plate in galvanized steel sheet.
- Osmotic valve to balance internal/external pressure.
- Dedicated space for any surge protection devices or remote control systems.

Materials:

- Extruded aluminum.
- Galvanized steel.
- Extra clear transparent or prismatic tempered flat glass.
- Stainless steel fasteners.

Fixing:

- Fixing by two headless screws M6 lock nuts with stainless steel.
- Central frame with a tilting system of $\pm 45^\circ$.

Operation and maintenance:

- Please refer to the installation and maintenance manual of the product.
- It is responsibility of the installer the correct installation and electric connection in accordance with applicable regulations.

TECHNICAL DATA:

Electrical and Optical features::

- Voltage: 120-277V (universal).
- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: $-31^\circ\text{F}/+95^\circ\text{F}$.
- Lumen output: from 1,500 to 2,500 lm.
- Color temperature: 2,700K to 4,000K
- Color Rendering Index: CRI > 80 (70 and 90 on demand).
- Electronic power supply with protection against short circuits, overheating and power surges.
- Standard surge protection for differential/common mode up to 10kV/10kV.

DRIVER FUNCTIONS:

Description

1-10 (Analogic control)

DALI (Digital control)

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA V - ST

Prismatic flat glass - High Power LED
(Single Lens, PMMA).

2,700K

lm tot	W tot	lm/W
1,000	15.00	67

3,000K

lm tot	W tot	lm/W
1,000	14.5	69

3,500K

lm tot	W tot	lm/W
1,000	14.5	69

4,000K

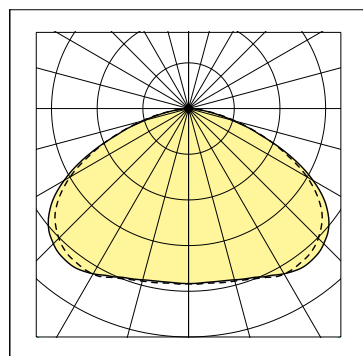
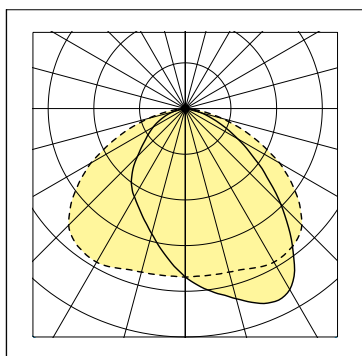
lm tot	W tot	lm/W
1,000	14.0	71

Type II

Prismatic flat glass

Type V

Prismatic flat glass



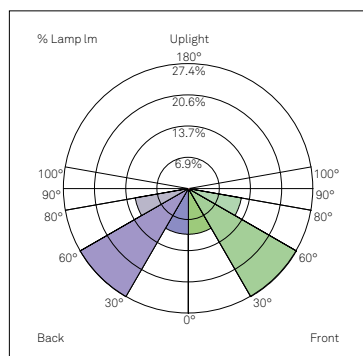
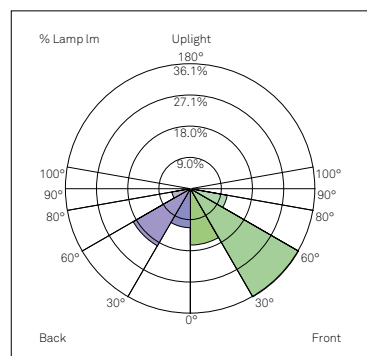
LOR 100%

Full Cutoff



LOR 100%

Full Cutoff



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	16.3	16.3
FM	30° - 60°	36.1	36.1
FH	60° - 80°	10.8	10.8
FVH	80° - 90°	0.7	0.7
BL	0° - 30°	11.3	11.3
BM	30° - 60°	19.1	19.1
BH	60° - 80°	5.4	5.4
BVH	80° - 90°	0.3	0.3
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U1 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	10.0	10.0
FM	30° - 60°	27.4	27.4
FH	60° - 80°	11.8	11.8
FVH	80° - 90°	0.7	0.7
BL	0° - 30°	10.0	10.0
BM	30° - 60°	27.4	27.4
BH	60° - 80°	11.8	11.8
BVH	80° - 90°	0.7	0.7
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U1 G0

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA V - PR

Trasparent flat glass - COB LED
(Reflector, Silicone).

2,700K

lm tot	W tot	lm/W
1,500	14.1	106
2,500	24.2	103

3,000K

lm tot	W tot	lm/W
1,500	14.0	107
2,500	23.9	105

3,500K

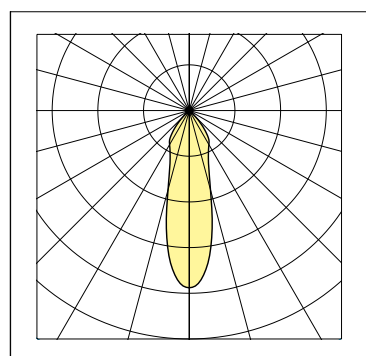
lm tot	W tot	lm/W
1,500	13.3	113
2,500	22.8	110

4,000K

lm tot	W tot	lm/W
1,500	12.7	119
2,500	21.8	115

30° Medium narrow spot

Transparent flat glass

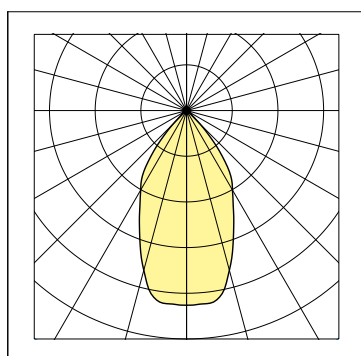


LOR 100%
Full Cutoff
NEMA class 5x5



60° Medium flood

Transparent flat glass

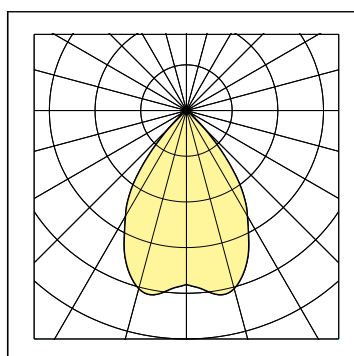


LOR 100%
Full Cutoff
NEMA class 5x5



70° Medium wide flood

Transparent flat glass

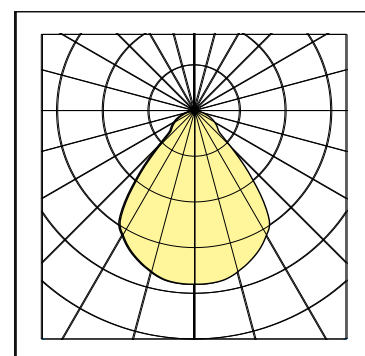


LOR 100%
Full Cutoff
NEMA class 5x5



80° Medium wide flood

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 7x7



Light Beam Table - 30°, 1,500 lm

h (ft)	Eav (fc)	D (ft)
12	13	6.07
16	7	8.10
20	5	10.12

Light Beam Table - 60°, 1,500 lm

h (ft)	Eav (fc)	D (ft)
12	6	12.97
16	3	17.30
20	2	21.62

Light Beam Table - 70°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	4	17.08
16	2	22.74
20	1	28.43

Light Beam Table - 80°, 1,500 lm

h (ft)	Eav (fc)	D (ft)
12	3	20.42
16	1	27.23
20	1	34.04

Light Beam Table - 30°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	21	6.07
16	18	8.10
20	8	10.12

Light Beam Table - 60°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	10	12.97
16	6	17.30
20	4	21.62

Light Beam Table - 70°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	7	17.06
16	4	22.74
20	2	28.43

Light Beam Table - 80°, 2,500 lm

h (ft)	Eav (fc)	D (ft)
12	4	20.42
16	2	27.23
20	2	34.04

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA BOLLARD (4")

Nebula Bollard luminaire head consists of two sources. Each source can be independently configured. The overview below lists available options.

NEBULA BOLLARD CONFIGURATION # _____

LUMINAIRE HEAD DOWN LIGHT

Luminaire configuration number to be also written in the lamp post configuration page.

NEBULA BOLLARD - EMPTY

NEBULA BOLLARD - ST

HIGH POWER LED (SINGLE LENS, PMMA)

Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	2,700K	1,000	1-10V	Prismatic flat glass
Type V	3,000K		DALI	
	3,500K			
	4,000K			

NEBULA BOLLARD - LUMINAIRE HEAD COLOR

Powder coating	Anodizing
Neri grey	Silver anodizing
Pure white	Gold anodizing
White aluminum	Bronze anodizing
Grey aluminum	Brown anodizing
Jet black	Black anodizing
Moss green	

NEBULA BOLLARD - POLE COLOR

Powder coating	Anodizing
Neri grey	Silver anodizing
Pure white	Gold anodizing
White aluminum	Bronze anodizing
Grey aluminum	Brown anodizing
Jet black	Black anodizing
Moss green	



DOWN

NEBULA BOLLARD LUMINAIRE HEAD DOWN LIGHT

ST

Aperture lens

Prismatic flat
glass

NERI

NEBULA BOLLARD (4")

Nebula Bollard luminaire head consists of two sources. Each source can be independently configured. The overview below lists available options.

UP

NEBULA BOLLARD LUMINAIRE HEAD UP LIGHT

PR

RGBW

A + W

Aperture lens

Transparent flat glass

Prismatic flat glass



Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA BOLLARD CONFIGURATION # _____ LUMINAIRE HEAD UP LIGHT

Luminaire configuration number to be also written in the lamp post configuration page.

NEBULA BOLLARD - EMPTY

NEBULA BOLLARD - PR	COB LED (REFLECTOR, PC)			
Optic system	CCT	Lumen output	Driver function	Aperture lens
30° Medium narrow spot	2,700K	1,500	1-10V	Transparent flat glass
60° Medium flood	3,000K	2,500	DALI	
70° Medium wide flood	3,500K			
80° Medium wide flood	4,000K			

NEBULA BOLLARD - RGBW		HIGH POWER LED (SINGLE LENS, PMMA)			
Optic system	CCT	Lumen output	Driver function	Aperture lens	
15° Very narrow spot	RGBW	333 lm (R)	DMX	Transparent flat glass	
25° Narrow spot		289 lm (G)			
35° Medium narrow spot		89 lm (B)			
		500 lm (W)			

NEBULA BOLLARD - A + W	HIGH POWER LED (SINGLE LENS, PMMA)			
Optic system	CCT	Lumen output	Driver function	Aperture lens
Type II	Amber + White	180 lm (A)	1-10V	Prismatic flat glass
Type V		800 lm (W)	DALI	

NEBULA BOLLARD - LUMINAIRE HEAD COLOR

Powder coating	Anodizing
Neri grey	Silver anodizing
Pure white	Gold anodizing
White aluminum	Bronze anodizing
Grey aluminum	Brown anodizing
Jet black	Black anodizing
Moss green	

NEBULA BOLLARD - POLE COLOR

Powder coating	Anodizing
Neri grey	Silver anodizing
Pure white	Gold anodizing
White aluminum	Bronze anodizing
Grey aluminum	Brown anodizing
Jet black	Black anodizing
Moss green	

NERI

Nebula Bollard

Source	LED
Weight	26,4lb
Height	42"
Diameter	4"
EPA	-

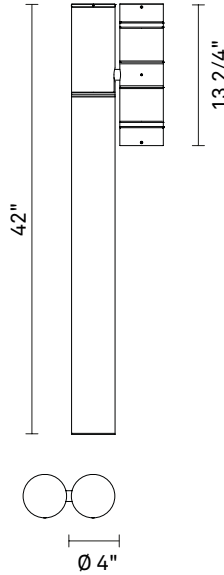
Nebula luminaire heads are composed by two light sources. They can be both switched on or just one.



Compliance:
UL Standard 1598 CSA C22.2 no.250.0-8

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	02/2020



Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Up	Type II	2,700K	500	1-10V	Prismatic flat glass
	Type V	3,500K	800	DALI	Transparent flat glass
	15° Very narrow spot	4,000K	1,000	DMX	
	25° Narrow spot	RGBW	1,500		
	30° Medium narrow spot	Amber + White	2,500		
	35° Medium narrow spot				
	60° Medium flood				
	70° Medium wide flood				
Down	80° Medium wide flood				
	Type II	2,700K	500	1-10V	Prismatic flat glass
	Type V	3,500K	800	DALI	Transparent flat glass
	15° Very narrow spot	4,000K	1,000	DMX	
	25° Narrow spot	RGBW	1,500		
	30° Medium narrow spot	Amber + White	2,500		
	35° Medium narrow spot				
	60° Medium flood				
	70° Medium wide flood				
	80° Medium wide flood				

SPECIFICATIONS:

Construction:

- External frame in extruded aluminum.
- Shield in extra-clear transparent or prismatic tempered glass.
- Integrated heat sink in aluminum.
- Wiring plate in galvanized steel sheet.
- Osmotic valve to balance internal/external pressure.
- Dedicated space for any surge protection devices or remote control systems.

Finish:

- Powder coating or anodizing.
- Powder coating: Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- Anodizing: silver anodizing, gold anodizing, bronze anodizing, brown anodizing, black anodizing.
- Information about paint steps used on this product in specific technical sheet.

Materials:

- Extruded aluminum.
- Galvanized steel.
- Extra clear transparent or prismatic tempered flat glass.
- Stainless steel fasteners.

Fixing:

- Fixing by two headless screws M6 lock nuts with stainless steel.
- Central frame with a tilting system of $\pm 45^\circ$.

Operation and maintenance:

- Please refer to the installation and maintenance manual of the product.
- It is responsibility of the installer the correct installation and electric connection in accordance with applicable regulations.

TECHNICAL DATA:

Electrical and Optical features::

- Voltage: 120-277V (universal).
- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: $-31^\circ\text{F}/+95^\circ\text{F}$.
- Lumen output: from 500 to 2,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber + White

- Color Rendering Index: CRI > 80 (70 and 90 on demand).
- Electronic power supply with protection against short circuits, overheating and power surges.
- Standard surge protection for differential/common mode up to 10kV/10kV.

DRIVER FUNCTIONS:

Description

1-10 (Analogic control)

DALI (Digital control)

DMX

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA BOLLARD - ST

Prismatic flat glass - COB LED
(Single Lens, Silicone).

2,700K

lm tot	W tot	lm/W
1,000	15.00	67

3,000K

lm tot	W tot	lm/W
1,000	14.5	69

3,500K

lm tot	W tot	lm/W
1,000	14.5	69

4,000K

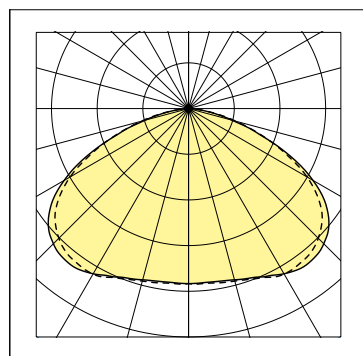
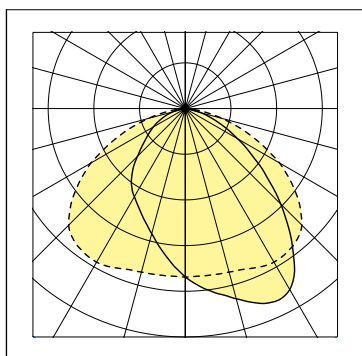
lm tot	W tot	lm/W
1,000	14.0	71

Type II

Prismatic flat glass

Type V

Prismatic flat glass



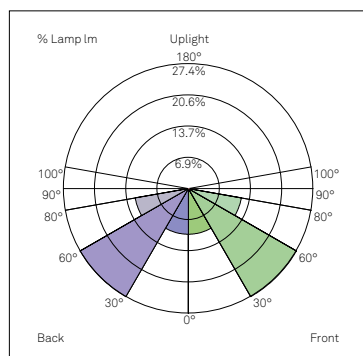
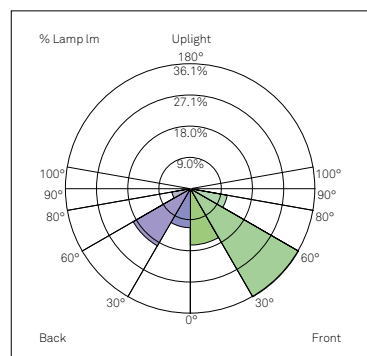
LOR 100%

Full Cutoff



LOR 100%

Full Cutoff



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	16.3	16.3
FM	30° - 60°	36.1	36.1
FH	60° - 80°	10.8	10.8
FVH	80° - 90°	0.7	0.7
BL	0° - 30°	11.3	11.3
BM	30° - 60°	19.1	19.1
BH	60° - 80°	5.4	5.4
BVH	80° - 90°	0.3	0.3
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U1 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	10.0	10.0
FM	30° - 60°	27.4	27.4
FH	60° - 80°	11.8	11.8
FVH	80° - 90°	0.7	0.7
BL	0° - 30°	10.0	10.0
BM	30° - 60°	27.4	27.4
BH	60° - 80°	11.8	11.8
BVH	80° - 90°	0.7	0.7
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U1 G0

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA BOLLARD - PR

Transparent flat glass - COB LED
(Reflector, Silicone).

2,700K

lm tot	W tot	lm/W
1,500	14.1	106
2,500	24.2	103

3,000K

lm tot	W tot	lm/W
1,500	14.0	107
2,500	23.9	105

3,500K

lm tot	W tot	lm/W
1,500	13.3	113
2,500	22.8	110

4,000K

lm tot	W tot	lm/W
1,500	12.7	119
2,500	21.8	115

30° Medium narrow spot

Transparent flat glass

60° Medium flood

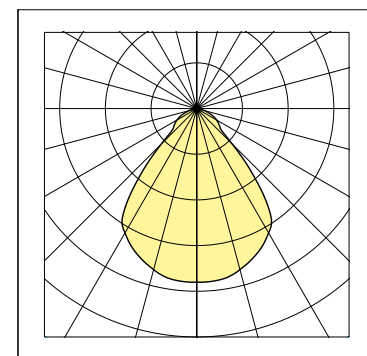
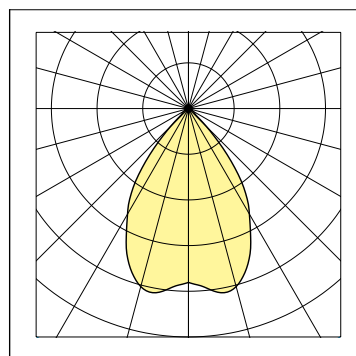
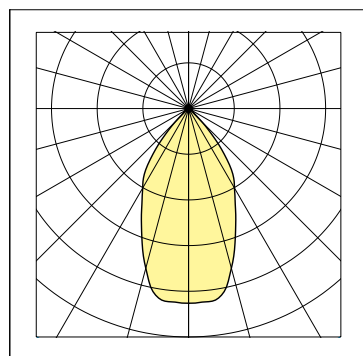
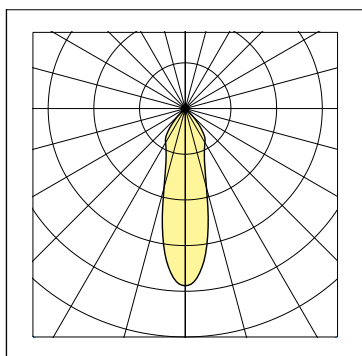
Transparent flat glass

70° Medium wide flood

Transparent flat glass

80° Medium wide flood

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 5x5



LOR 100%
Full Cutoff
NEMA class 5x5



LOR 100%
Full Cutoff
NEMA class 5x5



LOR 100%
Full Cutoff
NEMA class 7x7



NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA BOLLARD - RGBW

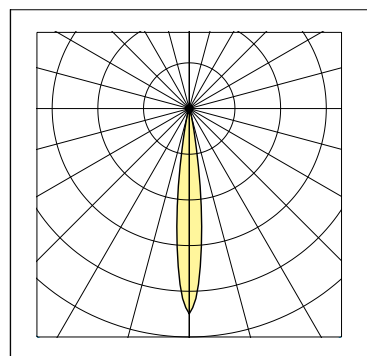
Transparent flat glass - High Power LED
(Single Lens, PMMA).

RGBW

Color	lm	λ (nm)
Red	333 (R)	623
Green	289 (G)	517
Blu	89 (B)	455
White	500 (W)	-

15° Very narrow spot

Transparent flat glass

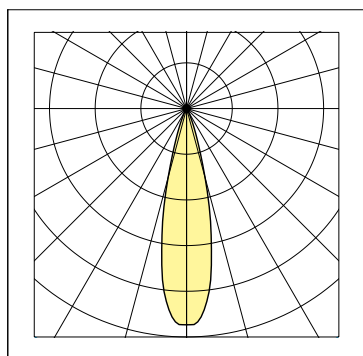


LOR 100%
Full Cutoff
NEMA class 2x2



25° Narrow spot

Transparent flat glass

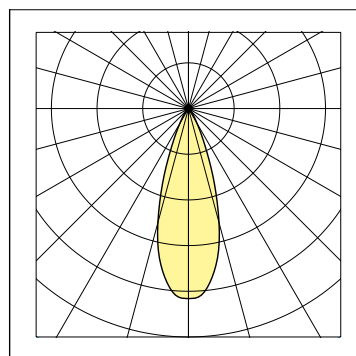


LOR 100%
Full Cutoff
NEMA class 3x3



35° Medium narrow spot

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 4x4



Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020

NEBULA BOLLARD - A + W

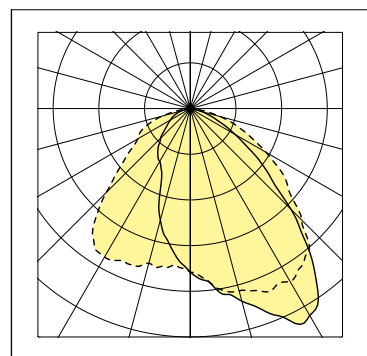
Prismatic flat glass - High Power LED
(Single Lens, PMMA).

Amber + White

Color	lm	λ (nm)
Amber	180	598
White	800	-

Type II

Prismatic flat glass



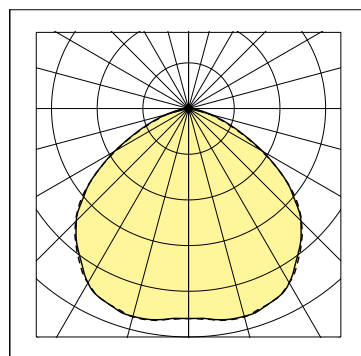
LOR 100%

Full Cutoff



Type V

Prismatic flat glass



LOR 100%

Full Cutoff



Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	03/2020