

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

NEBULA BOLLARD (4")
Nebula Bollard luminaire head consists of one source.

NEBULA BOLLARD CONFIGURATION # _____
LUMINAIRE HEAD
DOWN LIGHT

☐ **NEBULA BOLLARD - ST**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type I	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,000	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> Type II	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 1,500		
<input type="checkbox"/> Type IV	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> Type V				

☐ **NEBULA BOLLARD - PR**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 30° Medium narrow spot	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,500	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 60° Narrow flood	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 1,500		
<input type="checkbox"/> 70° Medium wide flood	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> 80° Medium wide flood				

☐ **NEBULA BOLLARD - RGBW**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 15° Very narrow spot	<input type="checkbox"/> RGBW	270 lm (R)	<input type="checkbox"/> DMX	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 25° Narrow spot		210 lm (G)		
<input type="checkbox"/> 35° Medium narrow spot		75 lm (B)		
		390 lm (W)		

☐ **NEBULA BOLLARD - A**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type II	<input type="checkbox"/> Amber	350 lm (A)	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Prismatic flat glass
<input type="checkbox"/> Type V				

☐ **NEBULA BOLLARD - SNOOT**

<input type="checkbox"/> snoot 30°
<input type="checkbox"/> snoot 45°

☐ **NEBULA BOLLARD - REFRACTOR SCREEN**

Linear Diffusion

☐ **NEBULA BOLLARD - FINISH**

Powder coating
<input type="checkbox"/> Neri grey
<input type="checkbox"/> Pure white
<input type="checkbox"/> White aluminum
<input type="checkbox"/> Grey aluminum
<input type="checkbox"/> Jet black
<input type="checkbox"/> Moss green



NEBULA BOLLARD
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	12/2023

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

☐ NEBULA BOLLARD - ST

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type I	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,000	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> Type II	<input type="checkbox"/> 3,000K			
<input type="checkbox"/> Type IV	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> Type V				

☐ NEBULA BOLLARD - PR

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 30° Medium narrow spot	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,500	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 60° Narrow flood	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 2,500		
<input type="checkbox"/> 70° Medium wide flood	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> 80° Medium wide flood				

☐ NEBULA BOLLARD - RGBW

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 15° Very narrow spot	<input type="checkbox"/> RGBW	270 lm (R)	<input type="checkbox"/> DMX	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 25° Narrow spot		210 lm (G)		
<input type="checkbox"/> 35° Medium narrow spot		75 lm (B)		
		390 lm (W)		

☐ NEBULA BOLLARD - A

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type II	<input type="checkbox"/> Amber	350 lm (A)	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Prismatic flat glass
<input type="checkbox"/> Type V				

☐ NEBULA BOLLARD - SNOOT

<input type="checkbox"/> snoot 30°
<input type="checkbox"/> snoot 45°

☐ NEBULA BOLLARD - REFRACTOR SCREEN

Linear Diffusion

☐ NEBULA BOLLARD - FINISH

Powder coating
<input type="checkbox"/> Neri grey
<input type="checkbox"/> Pure white
<input type="checkbox"/> White aluminum
<input type="checkbox"/> Grey aluminum
<input type="checkbox"/> Jet black
<input type="checkbox"/> Moss green



NEBULA BOLLARD LUMINAIRE HEAD DOWN LIGHT ST

PR

RGBW

A

Aperture lens

Transparent flat
glass

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.



**NEBULA BOLLARD
LUMINAIRE HEAD
DOWN LIGHT
ST**

PR

RGBW

A

Aperture lens

Transparent flat
glass

Prismatic flat
glass

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

NEBULA BOLLARD CONFIGURATION # _____
**LUMINAIRE HEAD
DOWN LIGHT**

☐ **NEBULA BOLLARD - ST**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type I	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,000	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> Type II	<input type="checkbox"/> 3,000K			
<input type="checkbox"/> Type IV	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> Type V				

☐ **NEBULA BOLLARD - PR**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 30° Medium narrow spot	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,500	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 60° Narrow flood	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 2,500		
<input type="checkbox"/> 70° Medium wide flood	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> 80° Medium wide flood				

☐ **NEBULA BOLLARD - RGBW**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 15° Very narrow spot	<input type="checkbox"/> RGBW	270 lm (R)	<input type="checkbox"/> DMX	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 25° Narrow spot		210 lm (G)		
<input type="checkbox"/> 35° Medium narrow spot		75 lm (B)		
		390 lm (W)		

☐ **NEBULA BOLLARD - A**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type II	<input type="checkbox"/> Amber	350 lm (A)	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Prismatic flat glass
<input type="checkbox"/> Type V				

☐ **NEBULA BOLLARD - SNOOT**

<input type="checkbox"/> snoot 30°
<input type="checkbox"/> snoot 45°

☐ **NEBULA BOLLARD - REFRACTOR SCREEN**

Linear Diffusion

☐ **NEBULA BOLLARD - FINISH**

Powder coating
<input type="checkbox"/> Neri grey
<input type="checkbox"/> Pure white
<input type="checkbox"/> White aluminum
<input type="checkbox"/> Grey aluminum
<input type="checkbox"/> Jet black
<input type="checkbox"/> Moss green

NERI

Nebula Bollard

Source	LED
Weight	17,6lb
Height	42"
Diameter	4"
EPA	1,27 ft ²

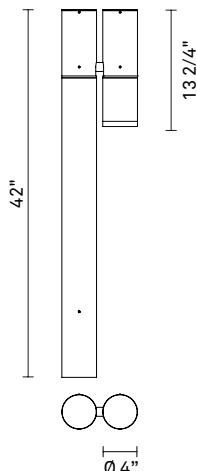
Nebula luminaire heads are composed by one light source.



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

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023



Nebula Bollard - ST

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
	Type I	2,700K	1,000	0-10V	Prismatic flat glass
	Type II	3,000K	1,500		
	Type IV	4,000K			
	Type V				

Nebula Bollard - PR

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
	30° Medium narrow spot	2,700K	1,000	0-10V	Transparent flat glass
	60° Medium flood	3,000K	1,500		
	70° Medium wide flood	4,000K	2,500		
	80° Medium wide flood				

Nebula Bollard - RGBW

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
	15° Very narrow spot	RGBW	270 (R)	DMX	Transparent flat glass
	25° Narrow spot		210 (G)		
	35° Medium narrow spot		75 (B)		
			390 (W)		

Nebula Bollard - A

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
	Type II	A	350	0-10V	Prismatic flat glass
	Type V				

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.

Materials:

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

Finish:

- Powder coating or anodizing.
- Powder coating:
Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- 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 $\pm 45^\circ$.

TECHNICAL DATA:

Electrical:

- Voltage: 120-277V (universal).
- Rated power: from 12.6 W to 24.0 W.

- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: -31°F / $+95^\circ\text{F}$.
- Standard surge protection for differential/common mode 10kV/10kV.

Optical features:

- Lumen output: from 1,000 to 1,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber.
- Color Rendering Index: CRI > 80
- LED type: Nichia NVSLE21A, Nebula ST (estimated life 100,000 h L80 - $T_q=77^\circ\text{F}$).
- LED type: COB CREE CMU 2287, Nebula PR (estimated life 75,000 h L80 - $T_q=122^\circ\text{F}$).
- LED type: Cree XM-L Color, Nebula RGBW (estimated life 91,000 h

L90 - $T_q=77^\circ\text{F}$).

- LED type: Cree XB-D Color, Nebula Amber (estimated life 60,000 h L80 - $T_q=77^\circ\text{F}$).

DRIVER FUNCTIONS:

Description

0-10V (Analogic control)

DMX

NERI

Nebula Bollard

Source	LED
Weight	22,0lb
Height	42"
Diameter	4"
EPA	1,55 ft ²

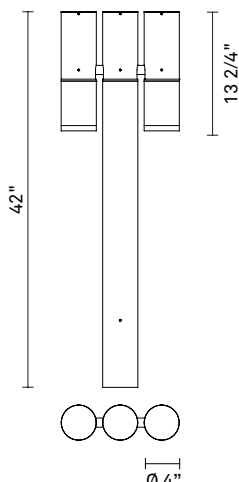
Nebula luminaire heads are composed by two light sources.



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

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023



Nebula Bollard - ST

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Left	Type I	2,700K	1,000	0-10V	Prismatic flat glass
	Type II	3,000K	1,500		
	Type IV	4,000K			
	Type V				

Nebula Bollard - ST

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Right	Type I	2,700K	1,000	0-10V	Prismatic flat glass
	Type II	3,000K	1,500		
	Type IV	4,000K			
	Type V				

Nebula Bollard - PR

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Left	30° Medium narrow spot	2,700K	1,000	0-10V	Trasparent flat glass
	60° Medium flood	3,000K	1,500		
	70° Medium wide flood	4,000K	2,500		
	80° Medium wide flood				

Nebula Bollard - PR

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Right	30° Medium narrow spot	2,700K	1,000	0-10V	Trasparent flat glass
	60° Medium flood	3,000K	1,500		
	70° Medium wide flood	4,000K	2,500		
	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.

Materials:

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

Finish:

- Powder coating or anodizing.
- Powder coating:
Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- 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 $\pm 45^\circ$.

TECHNICAL DATA:

Electrical:

- Voltage: 120-277V (universal).
- Rated power: from 12.6 W to 24.0 W.

- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: $-31^\circ\text{F} / +95^\circ\text{F}$.
- Standard surge protection for differential/common mode 10kV/10kV.

Optical features:

- Lumen output: from 1,000 to 1,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber.
- Color Rendering Index: CRI > 80
- LED type: Nichia NVSLE21A, Nebula ST (estimated life 100,000 h L80 - $T_q=77^\circ\text{F}$).
- LED type: COB CREE CMU 2287, Nebula PR (estimated life 75,000 h L80 - $T_q=122^\circ\text{F}$).
- LED type: Cree XM-L Color, Nebula RGBW (estimated life 91,000 h

L90 - $T_q=77^\circ\text{F}$).

- LED type: Cree XB-D Color, Nebula Amber (estimated life 60,000 h L80 - $T_q=77^\circ\text{F}$).

DRIVER FUNCTIONS:

Description

0-10V (Analogic control)

DMX

NERI

Nebula Bollard

Source	LED
Weight	22,0lb
Height	42"
Diameter	4"
EPA	1,55 ft ²

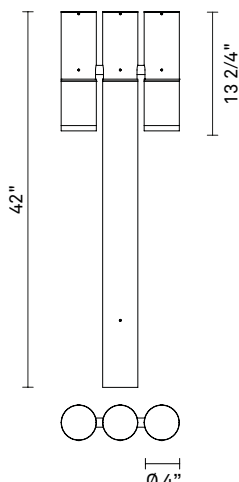
Nebula luminaire heads are composed by two light sources.



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

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023



Nebula Bollard - RGBW

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Left	15° Very narrow spot 25° Narrow spot 35° Medium narrow spot	RGBW	270 (R) 210 (G) 75 (B) 390 (W)	DMX	Transparent flat glass

Nebula Bollard - RGBW

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Right	15° Very narrow spot 25° Narrow spot 35° Medium narrow spot	RGBW	270 (R) 210 (G) 75 (B) 390 (W)	DMX	Transparent flat glass

Nebula Bollard - A

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Left	Type II Type V	A	350	0-10V	Prismatic flat glass

Nebula Bollard - A

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Right	Type II Type V	A	350	0-10V	Prismatic flat glass

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.

Materials:

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

Finish:

- Powder coating or anodizing.
- Powder coating:
Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- 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 $\pm 45^\circ$.

TECHNICAL DATA:

Electrical:

- Voltage: 120-277V (universal).
- Rated power: from 12.6 W to 24.0 W.

- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: -31°F / $+95^\circ\text{F}$.
- Standard surge protection for differential/common mode 10kV/10kV.

Optical features:

- Lumen output: from 1,000 to 1,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber.
- Color Rendering Index: CRI > 80
- LED type: Nichia NVSLE21A, Nebula ST (estimated life 100,000 h L80 - $T_q=77^\circ\text{F}$).
- LED type: COB CREE CMU 2287, Nebula PR (estimated life 75,000 h L80 - $T_q=122^\circ\text{F}$).
- LED type: Cree XM-L Color, Nebula RGBW (estimated life 91,000 h

- L90 - $T_q=77^\circ\text{F}$).
- LED type: Cree XB-D Color, Nebula Amber (estimated life 60,000 h L80 - $T_q=77^\circ\text{F}$).

DRIVER FUNCTIONS:

Description

0-10V (Analogic control)

DMX

NERI

NEBULA BOLLARD - ST

Prismatic flat glass - COB LED

2,700K

lm tot	W tot	lm/W
1,000	12.5	80
1,500	18.7	80

3,000K

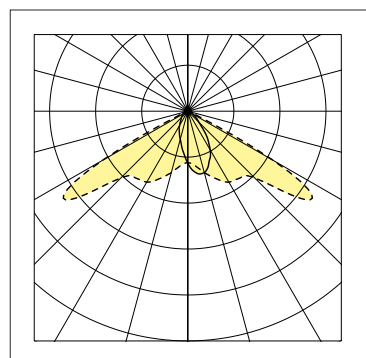
lm tot	W tot	lm/W
1,000	11.6	86
1,500	17.4	86

4,000K

lm tot	W tot	lm/W
1,000	10.3	97
1,500	15.5	97

Type I

Prismatic flat glass

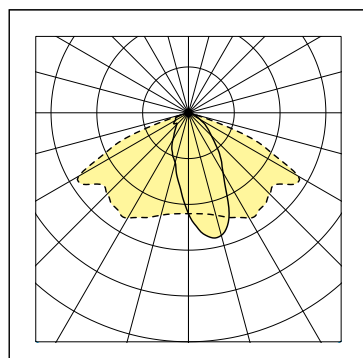


LOR 100%
Full Cutoff



Type II

Prismatic flat glass

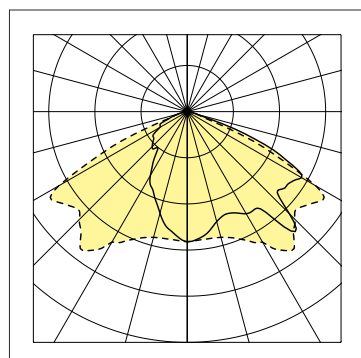


LOR 100%
Full Cutoff

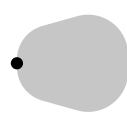


Type IV

Prismatic flat glass

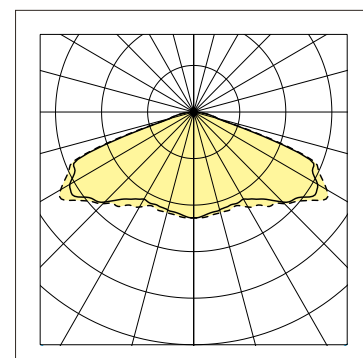


LOR 100%
Full Cutoff

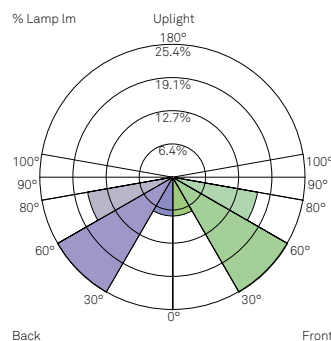
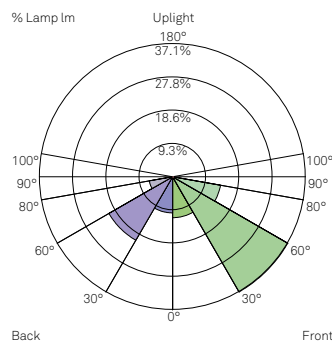
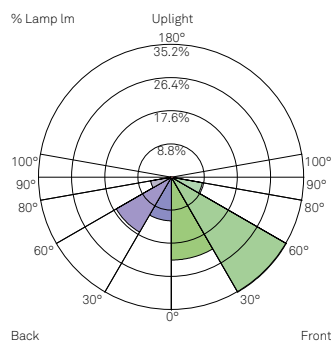
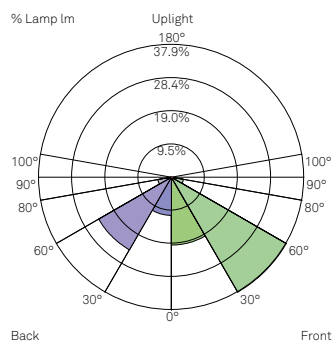


Type V

Prismatic flat glass



LOR 100%
Full Cutoff



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	19.4	19.4
FM	30° - 60°	37.9	37.9
FH	60° - 80°	3.5	3.5
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	10.9	10.9
BM	30° - 60°	24.0	24.0
BH	60° - 80°	3.9	3.9
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U0 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	22.0	22.0
FM	30° - 60°	35.2	35.2
FH	60° - 80°	8.3	8.3
FVH	80° - 90°	0.3	0.3
BL	0° - 30°	11.6	11.6
BM	30° - 60°	16.8	16.8
BH	60° - 80°	5.6	5.6
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 U0 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	11.4	11.4
FM	30° - 60°	37.1	37.1
FH	60° - 80°	13.6	13.6
FVH	80° - 90°	0.3	0.3
BL	0° - 30°	10.1	10.1
BM	30° - 60°	20.5	20.5
BH	60° - 80°	6.6	6.6
BVH	80° - 90°	0.4	0.4
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B0 U0 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	7.4	7.4
FM	30° - 60°	25.4	25.4
FH	60° - 80°	16.5	16.5
FVH	80° - 90°	0.6	0.6
BL	0° - 30°	7.4	7.4
BM	30° - 60°	25.4	25.4
BH	60° - 80°	16.5	16.5
BVH	80° - 90°	0.6	0.6
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U0 G0

NERI

NEBULA BOLLARD - PR

Transparent flat glass - COB LED

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
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2,700K

lm tot	W tot	lm/W
1,000	9.7	103
1,500	13.5	111
2,500	21.0	119

3,000K

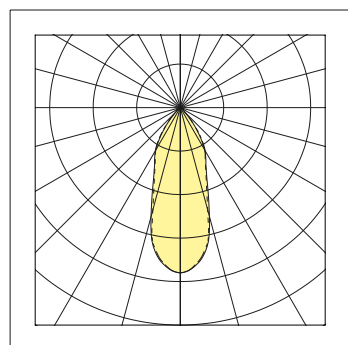
lm tot	W tot	lm/W
1,000	9.3	108
1,500	12.3	116
2,500	20.0	125

4,000K

lm tot	W tot	lm/W
1,000	9.0	111
1,500	12.6	119
2,500	19.4	129

30° Medium narrow spot

Transparent flat glass

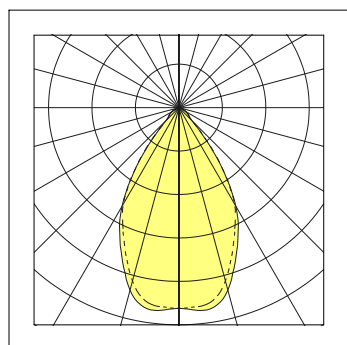


LOR 100%
Full Cutoff
NEMA class 5x5



60° Medium flood

Transparent flat glass

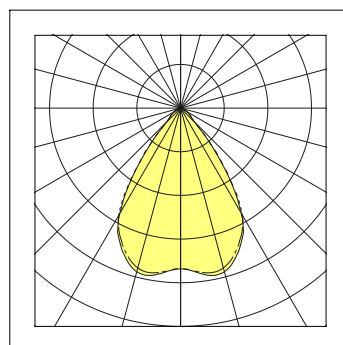


LOR 100%
Full Cutoff
NEMA class 5x5



70° Medium wide flood

Transparent flat glass

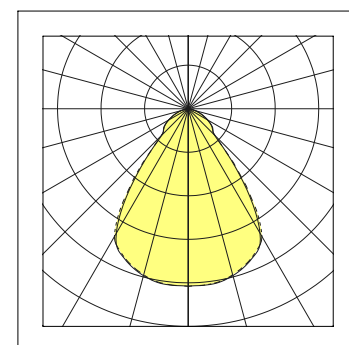


LOR 100%
Full Cutoff
NEMA class 5x5

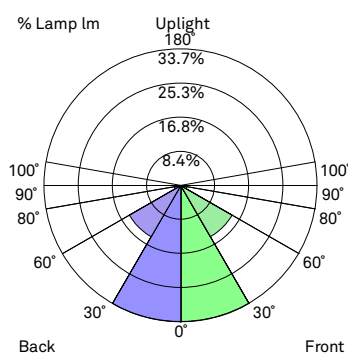


80° Medium wide flood

Transparent flat glass

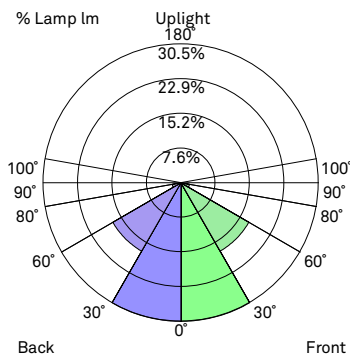


LOR 100%
Full Cutoff
NEMA class 7x7



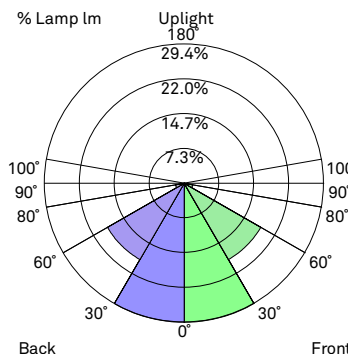
LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	33.7	33.7
FM	30° - 60°	14.6	14.6
FH	60° - 80°	1.6	1.6
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	33.7	33.7
BM	30° - 60°	14.6	14.6
BH	60° - 80°	1.6	1.6
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

BUG: B2 U0 G0



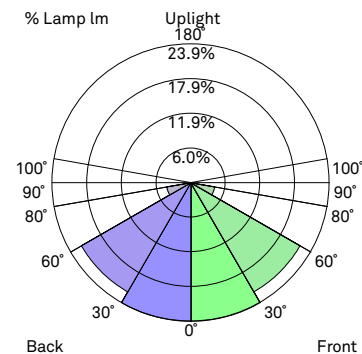
LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	30.5	30.5
FM	30° - 60°	17.4	17.4
FH	60° - 80°	1.9	1.9
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	30.5	30.5
BM	30° - 60°	17.4	17.4
BH	60° - 80°	1.9	1.9
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

BUG: B2 U0 G0



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	29.4	29.4
FM	30° - 60°	18.6	18.6
FH	60° - 80°	1.8	1.8
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	29.4	29.4
BM	30° - 60°	18.6	18.6
BH	60° - 80°	1.8	1.8
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

BUG: B2 U0 G0



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	23.9	23.9
FM	30° - 60°	21.7	21.7
FH	60° - 80°	4.2	4.2
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	23.9	23.9
BM	30° - 60°	21.7	21.7
BH	60° - 80°	4.2	4.2
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

BUG: B2 U0 G0

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

NEBULA BOLLARD - RGBW

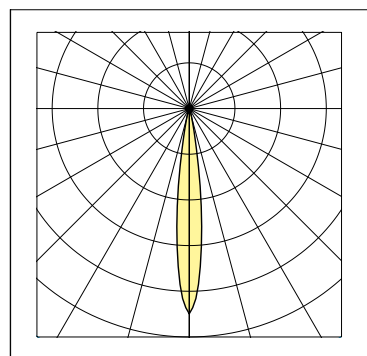
Transparent flat glass - High Power LED

RGBW

Color	lm	λ (nm)
Red	270 (R)	623
Green	210 (G)	517
Blu	75 (B)	455
White	390 (W)	-

15° Very narrow spot

Transparent flat glass

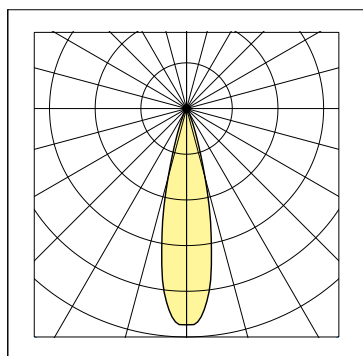


LOR 100%
Full Cutoff
NEMA class 2x2



25° Narrow spot

Transparent flat glass

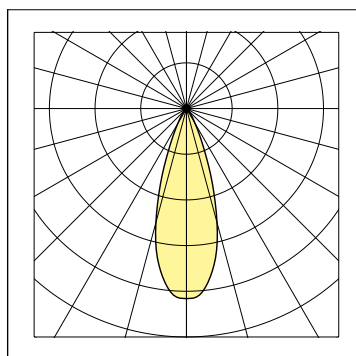


LOR 100%
Full Cutoff
NEMA class 3x3



35° Medium narrow spot

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 4x4



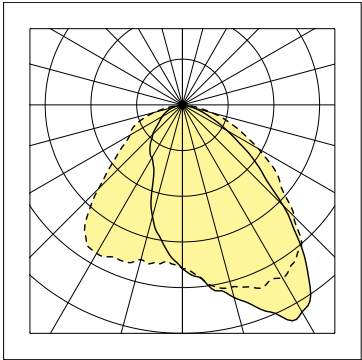
NEBULA BOLLARD - A
Prismatic flat glass - High Power LED

Amber		
Color	lm	λ (nm)
Amber	350	598

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

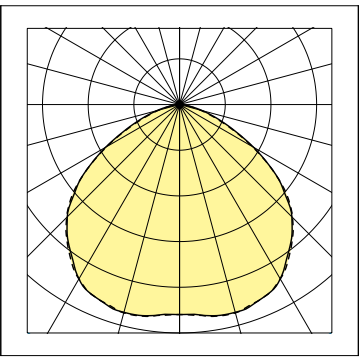
Type II
Prismatic flat glass



LOR 100%
Full Cutoff



Type V
Prismatic flat glass



LOR 100%
Full Cutoff



Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

NEBULA BOLLARD (4")
Nebula Bollard luminaire head consists of one source.

NEBULA BOLLARD CONFIGURATION # _____
LUMINAIRE HEAD
DOWN LIGHT



NEBULA BOLLARD
LUMINAIRE HEAD
DOWN LIGHT
ST

PR

RGBW

A

Aperture lens

Transparent flat glass

Prismatic flat glass

☐ **NEBULA BOLLARD - ST**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type I	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,000	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> Type II	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 1,500		
<input type="checkbox"/> Type IV	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> Type V				

☐ **NEBULA BOLLARD - PR**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 30° Medium narrow spot	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,500	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 60° Narrow flood	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 1,500		
<input type="checkbox"/> 70° Medium wide flood	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> 80° Medium wide flood				

☐ **NEBULA BOLLARD - RGBW**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 15° Very narrow spot	<input type="checkbox"/> RGBW	270 lm (R)	<input type="checkbox"/> DMX	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 25° Narrow spot		210 lm (G)		
<input type="checkbox"/> 35° Medium narrow spot		75 lm (B)		
		390 lm (W)		

☐ **NEBULA BOLLARD - A**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type II	<input type="checkbox"/> Amber	350 lm (A)	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Prismatic flat glass
<input type="checkbox"/> Type V				

☐ **NEBULA BOLLARD - SNOOT**

<input type="checkbox"/> snoot 30°
<input type="checkbox"/> snoot 45°

☐ **NEBULA BOLLARD - REFRACTOR SCREEN**

Linear Diffusion

☐ **NEBULA BOLLARD - FINISH**

Powder coating
<input type="checkbox"/> Neri grey
<input type="checkbox"/> Pure white
<input type="checkbox"/> White aluminum
<input type="checkbox"/> Grey aluminum
<input type="checkbox"/> Jet black
<input type="checkbox"/> Moss green

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

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



NEBULA BOLLARD LUMINAIRE HEAD DOWN LIGHT

ST

PR

RGBW

A

Aperture lens

Transparent flat
glass

Prismatic flat
glass

☐ NEBULA BOLLARD - ST

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type I	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,000	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> Type II	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 1,500		
<input type="checkbox"/> Type IV	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> Type V				

☐ NEBULA BOLLARD - PR

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 30° Medium narrow spot	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,500	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 60° Narrow flood	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 1,500		
<input type="checkbox"/> 70° Medium wide flood	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> 80° Medium wide flood				

☐ NEBULA BOLLARD - RGBW

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 15° Very narrow spot	<input type="checkbox"/> RGBW	270 lm (R)	<input type="checkbox"/> DMX	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 25° Narrow spot		210 lm (G)		
<input type="checkbox"/> 35° Medium narrow spot		75 lm (B)		
		390 lm (W)		

☐ NEBULA BOLLARD - A

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type II	<input type="checkbox"/> Amber	350 lm (A)	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Prismatic flat glass
<input type="checkbox"/> Type V				

☐ NEBULA BOLLARD - SNOOT

☐ snoot 30°

☐ snoot 45°

☐ NEBULA BOLLARD - REFRACTOR SCREEN

Linear Diffusion

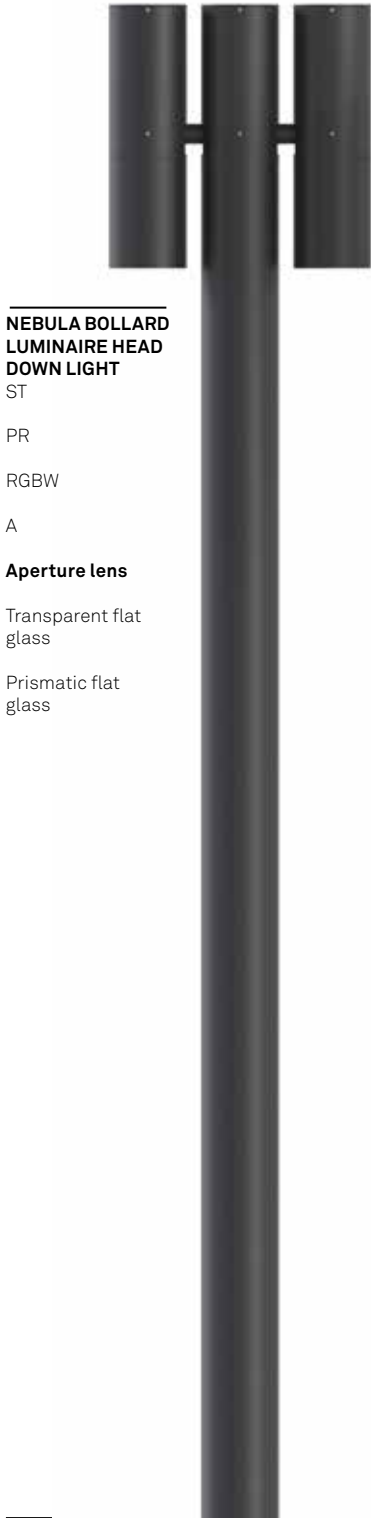
☐ NEBULA BOLLARD - FINISH

Powder coating

- ☐ Neri grey
- ☐ Pure white
- ☐ White aluminum
- ☐ Grey aluminum
- ☐ Jet black
- ☐ Moss green

NERI

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
LUMINAIRE HEAD
DOWN LIGHT**

ST

PR

RGBW

A

Aperture lens

Transparent flat glass

Prismatic flat glass

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

NEBULA BOLLARD CONFIGURATION # _____
**LUMINAIRE HEAD
DOWN LIGHT**

☐ **NEBULA BOLLARD - ST**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type I	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,000	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> Type II	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 1,500		
<input type="checkbox"/> Type IV	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> Type V				

☐ **NEBULA BOLLARD - PR**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 30° Medium narrow spot	<input type="checkbox"/> 2,700K	<input type="checkbox"/> 1,500	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 60° Narrow flood	<input type="checkbox"/> 3,000K	<input type="checkbox"/> 1,500		
<input type="checkbox"/> 70° Medium wide flood	<input type="checkbox"/> 4,000K			
<input type="checkbox"/> 80° Medium wide flood				

☐ **NEBULA BOLLARD - RGBW**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> 15° Very narrow spot	<input type="checkbox"/> RGBW	270 lm (R)	<input type="checkbox"/> DMX	<input type="checkbox"/> Transparent flat glass
<input type="checkbox"/> 25° Narrow spot		210 lm (G)		
<input type="checkbox"/> 35° Medium narrow spot		75 lm (B)		
		390 lm (W)		

☐ **NEBULA BOLLARD - A**

Optic system	CCT	Lumen output	Driver function	Aperture lens
<input type="checkbox"/> Type II	<input type="checkbox"/> Amber	350 lm (A)	<input type="checkbox"/> 0-10V	<input type="checkbox"/> Prismatic flat glass
<input type="checkbox"/> Type V				

☐ **NEBULA BOLLARD - SNOOT**

<input type="checkbox"/> snoot 30°
<input type="checkbox"/> snoot 45°

☐ **NEBULA BOLLARD - REFRACTOR SCREEN**

Linear Diffusion

☐ **NEBULA BOLLARD - FINISH**

Powder coating
<input type="checkbox"/> Neri grey
<input type="checkbox"/> Pure white
<input type="checkbox"/> White aluminum
<input type="checkbox"/> Grey aluminum
<input type="checkbox"/> Jet black
<input type="checkbox"/> Moss green

NERI

Nebula Bollard

Source	LED
Weight	24,2lb
Height	9'
Diameter	4"
EPA	2,73 ft ²

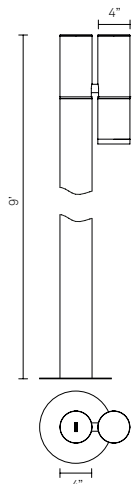
Nebula luminaire heads are composed by one light source.



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

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.00	12/2023



Nebula Bollard - ST

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
	Type I	2,700K	1,000	0-10V	Prismatic flat glass
	Type II	3,000K	1,500		
	Type IV	4,000K			
	Type V				

Nebula Bollard - PR

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
	30° Medium narrow spot	2,700K	1,000	0-10V	Transparent flat glass
	60° Medium flood	3,000K	1,500		
	70° Medium wide flood	4,000K	2,500		
	80° Medium wide flood				

Nebula Bollard - RGBW

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
	15° Very narrow spot	RGBW	270 (R)	DMX	Transparent flat glass
	25° Narrow spot		210 (G)		
	35° Medium narrow spot		75 (B)		
			390 (W)		

Nebula Bollard - A

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
	Type II	A	350	0-10V	Prismatic flat glass
	Type V				

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.

Materials:

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

Finish:

- Powder coating or anodizing.
- Powder coating:
Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- 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 $\pm 45^\circ$.

TECHNICAL DATA:

Electrical:

- Voltage: 120-277V (universal).
- Rated power: from 12.6 W to 24.0 W.

- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: -31°F / $+95^\circ\text{F}$.
- Standard surge protection for differential/common mode 10kV/10kV.

Optical features:

- Lumen output: from 1,000 to 1,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber.
- Color Rendering Index: CRI > 80
- LED type: Nichia NVSLE21A, Nebula ST (estimated life 100,000 h L80 - $T_q=77^\circ\text{F}$).
- LED type: COB CREE CMU 2287, Nebula PR (estimated life 75,000 h L80 - $T_q=122^\circ\text{F}$).
- LED type: Cree XM-L Color, Nebula RGBW (estimated life 91,000 h

- L90 - $T_q=77^\circ\text{F}$).
- LED type: Cree XB-D Color, Nebula Amber (estimated life 60,000 h L80 - $T_q=77^\circ\text{F}$).

DRIVER FUNCTIONS:

Description

0-10V (Analogic control)

DMX

NERI

Nebula Bollard

Source	LED
Weight	28,6lb
Height	9'
Diameter	4"
EPA	3,1 ft ²

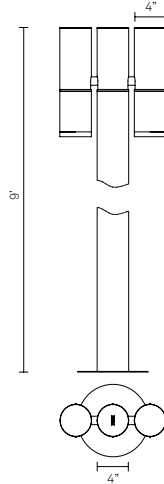
Nebula luminaire heads are composed by two light sources.



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

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.00	12/2023



Nebula Bollard - ST

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Left	Type I	2,700K	1,000	0-10V	Prismatic flat glass
	Type II	3,000K	1,500		
	Type IV	4,000K			
	Type V				

Nebula Bollard - ST

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Right	Type I	2,700K	1,000	0-10V	Prismatic flat glass
	Type II	3,000K	1,500		
	Type IV	4,000K			
	Type V				

Nebula Bollard - PR

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Left	30° Medium narrow spot	2,700K	1,000	0-10V	Transparent flat glass
	60° Medium flood	3,000K	1,500		
	70° Medium wide flood	4,000K	2,500		
	80° Medium wide flood				

Nebula Bollard - PR

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Right	30° Medium narrow spot	2,700K	1,000	0-10V	Transparent flat glass
	60° Medium flood	3,000K	1,500		
	70° Medium wide flood	4,000K	2,500		
	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.

Materials:

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

Finish:

- Powder coating or anodizing.
- Powder coating:
Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- 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 $\pm 45^\circ$.

TECHNICAL DATA:

Electrical:

- Voltage: 120-277V (universal).
- Rated power: from 12.6 W to 24.0 W.

- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: $-31^\circ\text{F} / +95^\circ\text{F}$.
- Standard surge protection for differential/common mode 10kV/10kV.

Optical features:

- Lumen output: from 1,000 to 1,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber.
- Color Rendering Index: CRI > 80
- LED type: Nichia NVSLE21A, Nebula ST (estimated life 100,000 h L80 - $T_q=77^\circ\text{F}$).
- LED type: COB CREE CMU 2287, Nebula PR (estimated life 75,000 h L80 - $T_q=122^\circ\text{F}$).
- LED type: Cree XM-L Color, Nebula RGBW (estimated life 91,000 h

L90 - $T_q=77^\circ\text{F}$).

- LED type: Cree XB-D Color, Nebula Amber (estimated life 60,000 h L80 - $T_q=77^\circ\text{F}$).

DRIVER FUNCTIONS:

Description

0-10V (Analogic control)

DMX

NERI

Nebula Bollard

Source	LED
Weight	28,6lb
Height	9'
Diameter	4"
EPA	3,1 ft ²

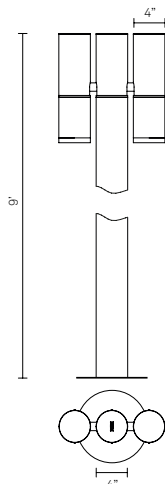
Nebula luminaire heads are composed by two light sources.



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

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.00	12/2023



Nebula Bollard - RGBW

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Left	15° Very narrow spot 25° Narrow spot 35° Medium narrow spot	RGBW	270 (R) 210 (G) 75 (B) 390 (W)	DMX	Transparent flat glass

Nebula Bollard - RGBW

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Right	15° Very narrow spot 25° Narrow spot 35° Medium narrow spot	RGBW	270 (R) 210 (G) 75 (B) 390 (W)	DMX	Transparent flat glass

Nebula Bollard - A

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Left	Type II Type V	A	350	0-10V	Prismatic flat glass

Nebula Bollard - A

Luminaire head	Optic system	CCT	Delivered lumen choices	Driver functions	Aperture lens
Right	Type II Type V	A	350	0-10V	Prismatic flat glass

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.

Materials:

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

Finish:

- Powder coating or anodizing.
- Powder coating:
Neri grey, pure white, white aluminum, grey aluminum, jet black, moss green.
- 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 $\pm 45^\circ$.

TECHNICAL DATA:

Electrical:

- Voltage: 120-277V (universal).
- Rated power: from 12.6 W to 24.0 W.

- Frequency: 50/60Hz.
- Protection rating: IP66, IK08.
- Operating temp.: -31°F / $+95^\circ\text{F}$.
- Standard surge protection for differential/common mode 10kV/10kV.

Optical features:

- Lumen output: from 1,000 to 1,500 lm.
- Color temperature: 2,700K to 4,000K, RGBW and Amber.
- Color Rendering Index: CRI > 80
- LED type: Nichia NVSLE21A, Nebula ST (estimated life 100,000 h L80 - $T_q=77^\circ\text{F}$).
- LED type: COB CREE CMU 2287, Nebula PR (estimated life 75,000 h L80 - $T_q=122^\circ\text{F}$).
- LED type: Cree XM-L Color, Nebula RGBW (estimated life 91,000 h

- L90 - $T_q=77^\circ\text{F}$).
- LED type: Cree XB-D Color, Nebula Amber (estimated life 60,000 h L80 - $T_q=77^\circ\text{F}$).

DRIVER FUNCTIONS:

Description

0-10V (Analogic control)

DMX

NERI

NEBULA BOLLARD - ST

Transparent flat glass - COB LED

2,700K

lm tot	W tot	lm/W
1,000	12.5	80
1,500	18.7	80

3,000K

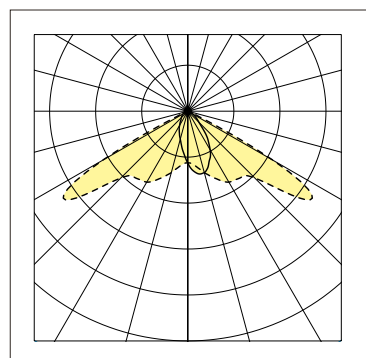
lm tot	W tot	lm/W
1,000	11.6	86
1,500	17.4	86

4,000K

lm tot	W tot	lm/W
1,000	10.3	97
1,500	15.5	97

Type I

Prismatic flat glass



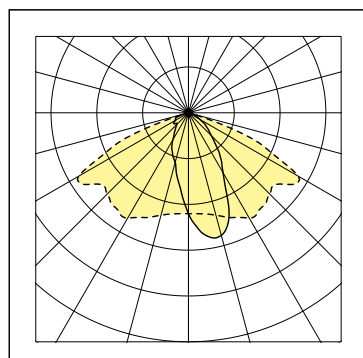
LOR 100%

Full Cutoff



Type II

Prismatic flat glass



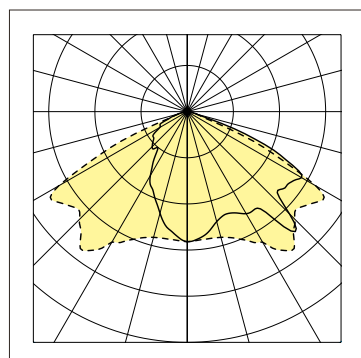
LOR 100%

Full Cutoff



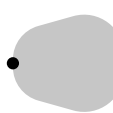
Type IV

Prismatic flat glass



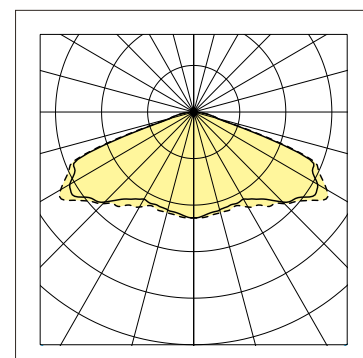
LOR 100%

Full Cutoff



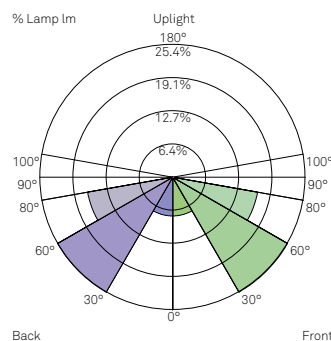
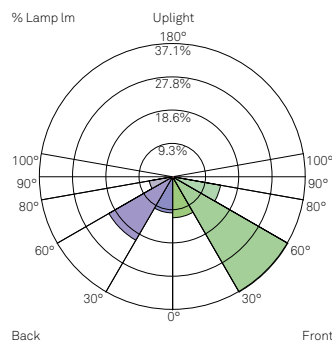
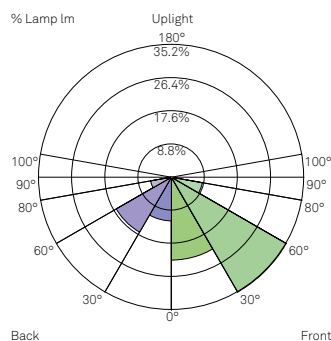
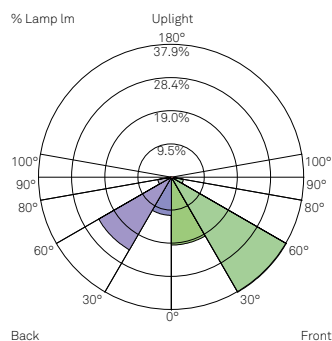
Type V

Prismatic flat glass



LOR 100%

Full Cutoff



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	19.4	19.4
FM	30° - 60°	37.9	37.9
FH	60° - 80°	3.5	3.5
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	10.9	10.9
BM	30° - 60°	24.0	24.0
BH	60° - 80°	3.9	3.9
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U0 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	22.0	22.0
FM	30° - 60°	35.2	35.2
FH	60° - 80°	8.3	8.3
FVH	80° - 90°	0.3	0.3
BL	0° - 30°	11.6	11.6
BM	30° - 60°	16.8	16.8
BH	60° - 80°	5.6	5.6
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 U0 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	11.4	11.4
FM	30° - 60°	37.1	37.1
FH	60° - 80°	13.6	13.6
FVH	80° - 90°	0.3	0.3
BL	0° - 30°	10.1	10.1
BM	30° - 60°	20.5	20.5
BH	60° - 80°	6.6	6.6
BVH	80° - 90°	0.4	0.4
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B0 U0 G0

LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	7.4	7.4
FM	30° - 60°	25.4	25.4
FH	60° - 80°	16.5	16.5
FVH	80° - 90°	0.6	0.6
BL	0° - 30°	7.4	7.4
BM	30° - 60°	25.4	25.4
BH	60° - 80°	16.5	16.5
BVH	80° - 90°	0.6	0.6
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

1,000lm - BUG: B1 U0 G0

NERI

NEBULA BOLLARD - PR

Transparent flat glass - COB LED

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

2,700K

lm tot	W tot	lm/W
1,000	9.7	103
1,500	13.5	111
2,500	21.0	119

3,000K

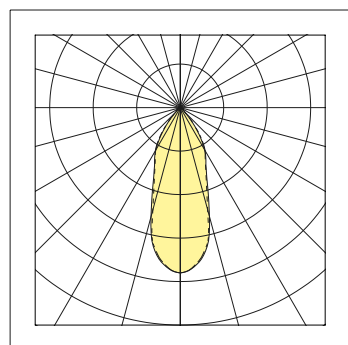
lm tot	W tot	lm/W
1,000	9.3	108
1,500	12.3	116
2,500	20.0	125

4,000K

lm tot	W tot	lm/W
1,000	9.0	111
1,500	12.6	119
2,500	19.4	129

30° Medium narrow spot

Transparent flat glass

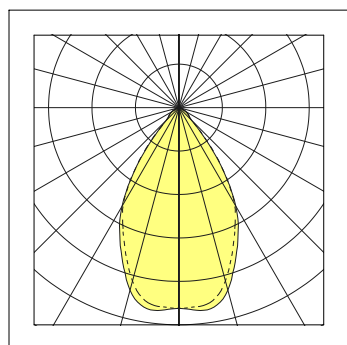


LOR 100%
Full Cutoff
NEMA class 5x5



60° Medium flood

Transparent flat glass

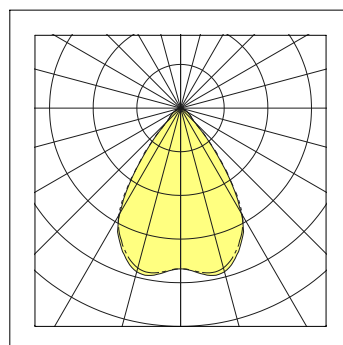


LOR 100%
Full Cutoff
NEMA class 5x5



70° Medium wide flood

Transparent flat glass

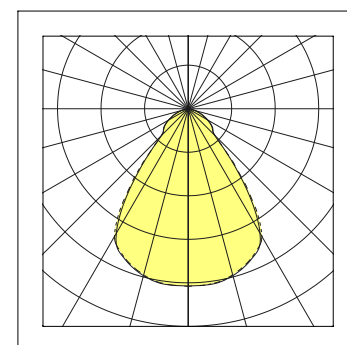


LOR 100%
Full Cutoff
NEMA class 5x5

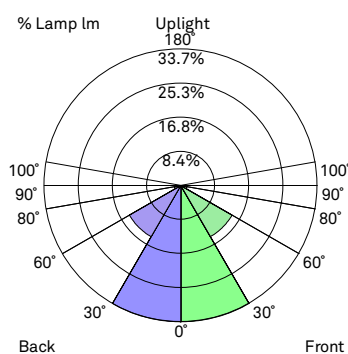


80° Medium wide flood

Transparent flat glass

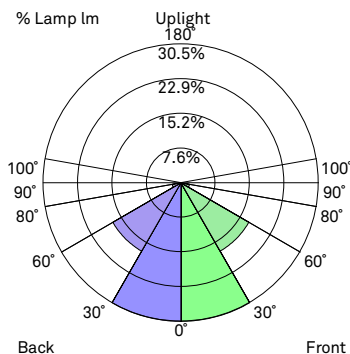


LOR 100%
Full Cutoff
NEMA class 7x7



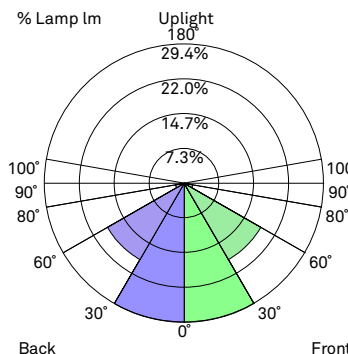
LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	33.7	33.7
FM	30° - 60°	14.6	14.6
FH	60° - 80°	1.6	1.6
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	33.7	33.7
BM	30° - 60°	14.6	14.6
BH	60° - 80°	1.6	1.6
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

BUG: B2 U0 G0



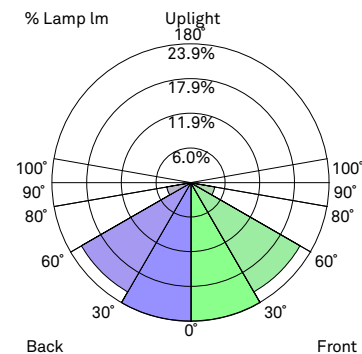
LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	30.5	30.5
FM	30° - 60°	17.4	17.4
FH	60° - 80°	1.9	1.9
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	30.5	30.5
BM	30° - 60°	17.4	17.4
BH	60° - 80°	1.9	1.9
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

BUG: B2 U0 G0



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	29.4	29.4
FM	30° - 60°	18.6	18.6
FH	60° - 80°	1.8	1.8
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	29.4	29.4
BM	30° - 60°	18.6	18.6
BH	60° - 80°	1.8	1.8
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

BUG: B2 U0 G0



LCS Zone	Angles	% Lamp	% Lum
FL	0° - 30°	23.9	23.9
FM	30° - 60°	21.7	21.7
FH	60° - 80°	4.2	4.2
FVH	80° - 90°	0.2	0.2
BL	0° - 30°	23.9	23.9
BM	30° - 60°	21.7	21.7
BH	60° - 80°	4.2	4.2
BVH	80° - 90°	0.2	0.2
UL	90° - 100°	0.0	0.0
UH	100° - 180°	0.0	0.0
Totals		100.0	100.0

BUG: B2 U0 G0

NERI

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

NEBULA BOLLARD - RGBW

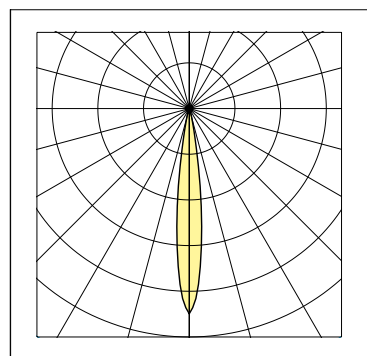
Transparent flat glass - High Power LED

RGBW

Color	lm	λ (nm)
Red	270 (R)	623
Green	210 (G)	517
Blu	75 (B)	455
White	390 (W)	-

15° Very narrow spot

Transparent flat glass

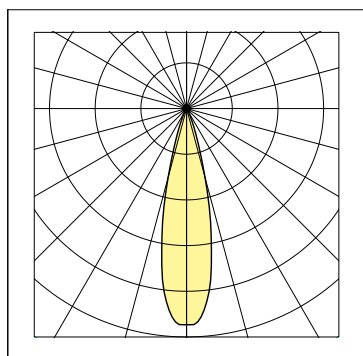


LOR 100%
Full Cutoff
NEMA class 2x2



25° Narrow spot

Transparent flat glass

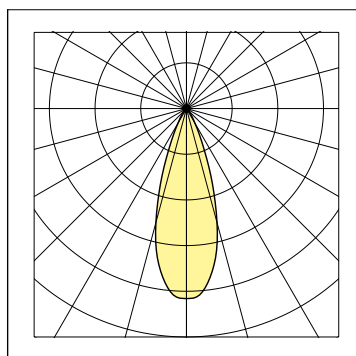


LOR 100%
Full Cutoff
NEMA class 3x3



35° Medium narrow spot

Transparent flat glass



LOR 100%
Full Cutoff
NEMA class 4x4



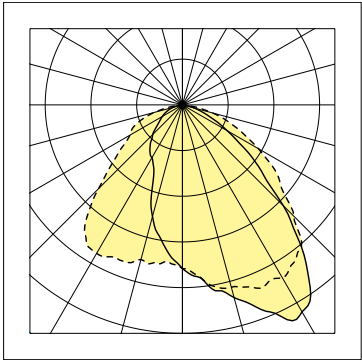
NEBULA BOLLARD - A
Prismatic flat glass - High Power LED

Amber		
Color	lm	λ (nm)
Amber	350	598

Project location:	
Project name:	
Model code #:	Date

Fixture type:	
Rev.01	12/2023

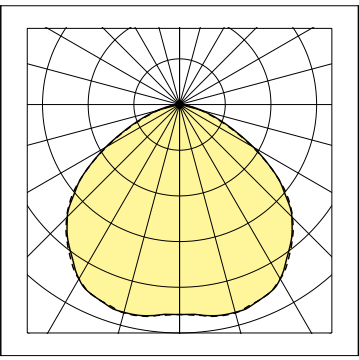
Type II
Prismatic flat glass



LOR 100%
Full Cutoff



Type V
Prismatic flat glass



LOR 100%
Full Cutoff



Project location:			
Project name:			
Model #:	OPNEB0000S000008	Date	

Description:

Post base cover for posts with maximum circular section 4".

Dimensions - Weight

Height	Lenght	Width	Weight
3 1/8"	9 7/8"	9 7/8"	4,4 lb

Materials:

- Galvanized steel sheet.
- Stainless steel screws.

Structure - Main components:

- The post base cover is made up by two piece "clam-shell" cover in aluminum (1/8" thick), designed for post attachment in two places with n.2 M8 screws.

Finish:

- Standard colour is dark grey NERI type.
- Information about paint steps used on this product in specific technical sheet.

