NERI

Project location:			
Project name:			
Model #:		Date	

Fixture type:

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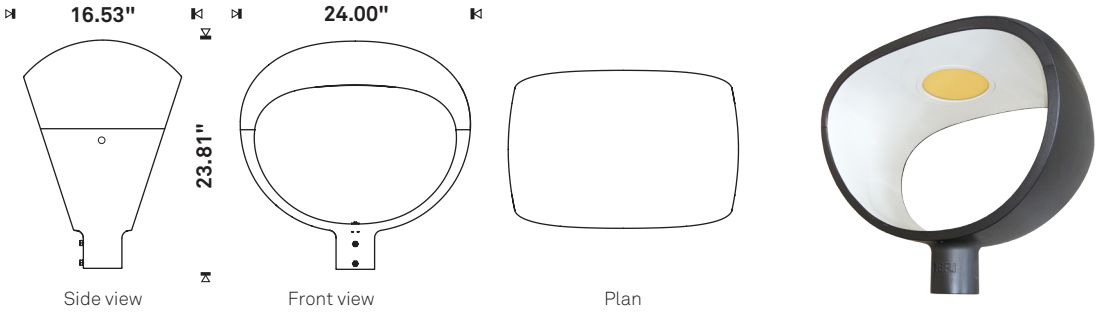
DESCRIPTION:
Light Hydra was been conceived by industrial designer Makio Hasuike. The light fixture is made in cast aluminium and galvanized steel sheet, with upright connection for tube with diameter 2.36". Removable upper frame for acces to auxiliary and optic compartment. Electrical components on removable plate with manual disconnector.
Optic symmetric, composed by a LED module and a mixing light chamber with screen in flat glass with phosphor remote technology.
Heat dissipation directly on the frame for an optimal control of temperature for ensure a operative life of over 70,000 hours (15 years). The light fixture require low-maintenance thank to Leds sources and optic system with IP66. It is ideal for illuminating cycle paths or pedestrian walkways in urban contemporary style areas with.
The suggested height of installation from 13.0' to 16.5'.

LIGHT HYDRA

LED Source - Comfort range

Contemporary

EPA = 0.834 ft²
Weight = 44.09 lbs (20.0 Kg)
Height = 23.81"
Lenght = 24,00"
Witht = 16.53"



Side view | Front view | Plan

MODEL:
code sample: **PUHYDL043H106**

Connection	Compliance	Series	Optic system	Colour temp.	Lumen output	Driver function	Voltage
P = Upright	**U** = UL 1598 standard	**HYDL** = Light Hydra LED source	**04** = Symmetric; IES class: Cut off; IESNA class.: type II Very Short	**1** = 3,000K **3** = 4,000K	**H1** = 3,000 lm **H2** = 4,000 lm	**02** = 1-10V + NCL **06** = DALI + NCL **14** = 6 hours. aut. flux red. + NCL	• 120-277 V 120 V 208 V 240 V 277 V

SPECIFICATIONS:

Construction:
- Upper frame removable.
- Lower frame with inside part in steel sheet white painted.
- Glass screen with remote phosphors.

Materials:
-Frame in cast aluminium (UNI 1706) and galvanized steel sheet.
-Tempered flat glass screen (shock resistance IK06).
-Stainless steel screws.

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

Mounting:
- Upright installation on tube with diameter of 2.36". Locking with two screws (M10) in stainless steel.
- Suitable for wet location.

Operation and maintenance:
- During assembly it is not necessary to open the light fixture, being provided with electric cable already connected internally. Use the connector provided, for connection to the mains.
- To access to the optical and auxiliary compartment, unlock with a screwdriver the two lateral devices and then lift the upper frame.
- No maintenance is required, except a periodic cleaning of the screen from dust.

TECHNICAL DATA:

Electrical:
- Compliance: UL Standard 1598 - CSA C22.2 no.250.0 (under approval).
- Voltage: 120-277V (universal).
- Rated power: from 38W to 59W.
- Frequency: 50/60Hz.
- Power factor: 0.95 (PFC).
- Protection rating: IP43.
- Operating temp.: -22°F +122°F (-30°C +50°C).
- Electrical power disconnection switch.
- Fuse (T6.3A 250V glass cartridge 5 X 20 mm - other type on request).
- Electronic ballast with self-diagnostic functions and monitoring for dangerous temperatures.

Optical Features:
- Light source: n°25 power leds
- Lumen output: 3,000 or 4,000 lm
- Color temperature: 3000K or 4000K
- Chromatic Rendering Index: CRI > 70
- Estimated life: 70,000 hours (L70 - Ta 25°C)
- LED source with efficiency of 90 lm/W.
- Protection rating optic system: IP66
- Optic (NLG 04): symmetric - cut off.
- IESNA classification: type II Short.
- Tempered flat glass screen with remote phosphors.
- No photobiological risk (EN/IEC 61471)
- Heat sink in aluminium integrated into the cover for optimal control of temperature with NTC sensor on led plate for the control of dangerous temperatures.

CONFIGURATION TABLES:

Configuration tables for lumen package:
Configurable with colour temperatures and different lumen output.
The watts table refers to the system (LED + Driver).

3,000 K - Colour temperature			
Code	lm output	Watt	lm/W
1H1	3,000	41	72
1H2	4,000	59	68

4,000 K - Colour temperature			
Code	lm output	Watt	lm/W
3H1	3,000	38	79
3H2	4,000	53	75

Configuration of driver functions

Code	Driver function
02	1-10V control + constant flux control (1-10V + NCL)
06	DALI control + constant flux control (DALI + NCL)
14	6 hours aut. flux reduction + constant flux control (6H NVL + NCL)

Note: NCL - constant flux control is standard with all driver functions.

On demand features
- Painting: colour of RAL range.

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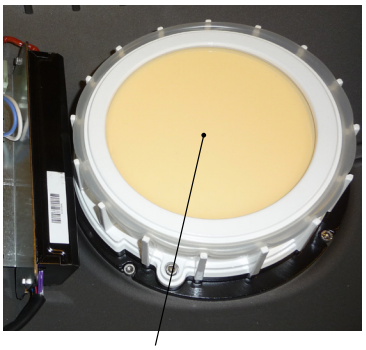
PHOTOMETRIC VALUE

LM-79 test and reports are performed in accordance with IESNA standards.

25 LED MODULE (OPTIC NLG 04)



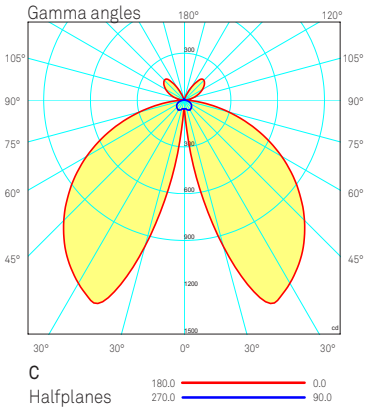
Screen with remote phosphores

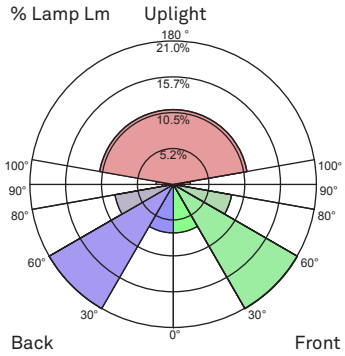
CONNECTOR - Detail

Electric cable already connected internally. Connector provided, for connection to the mains (IP66).

BOTTOM VIEW

OPTIC NLG 04 - Type II Very Short





Luminaire Classification System (LCS)			
LCS Zone	Angles	% lamp	% lum
FL	0° - 30°	7.1%	7.9%
FM	30° - 60°	21.0%	23.3%
FH	60° - 80°	8.7%	9.6%
FVH	80° - 90°	1.6%	1.8%
BL	0° - 30°	7.1%	7.9%
BM	30° - 60°	21.0%	23.3%
BH	60° - 80°	8.7%	9.6%
BVH	80° - 90°	1.6%	1.8%
UL	90° - 100°	2.5%	2.8%
UH	100° - 180°	10.9%	12.1%
Totals		90.1%	100%
BUG: B1 U3 G1 - Type II Very short			

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Technical sheet of painting cycles

Hot galvanized steel Aluminium

Rev. A 2013

Introduction
Painting is considered of great importance for the purposes of environmental safeguarding. Painting must be the result of a sustainable process.

Standard paint color
Dark grey matt metallized (type Neri).

Painting techniques performances for hot galvanized steel
In order to ensure quality and high resistance of items over time, painting products have the following performance features:

Resistance to QUV
ΔE less than 2 after 2,000 hours of exposure in compliance with UNI ISO 11507 test.
This value is certified with a certificate issued by an independent body.

Resistance to rusting
Resistance to saline mist test greater than 1,500 hours in compliance with UNI ISO 9227 test
This value is certified with a certificate issued by an independent body.

Tickness of paint when dry
-Thickness not less than 110 micron (µm) for parts in steel.

Table of environmental performance during application of paint to items.
The QUV and rust resistance parameters indicated above are obtained with a painting cycle of low environmental impact having the following emission parameters:
quantity of solvents in the painting product used per m^2
-lower than 50 g per m^2 for parts in hot galvanized steel.

Standard painting cycle for hot galvanized steel
-Grade SA2.5 micro-sandblasting.
-Application by spraying of a coat of twin-component zinc phosphate epoxy primer, diluted with water.
-Application by spraying of a coat of twin-component diluted polyurethane varnish, diluted with water.

Specific painting cycle for poles with core in hot galvanized steel
-Grade SA2.5 micro-sandblasting.
-Application by spraying of a coat of twin-component zinc phosphate epoxy primer, diluted with solvent.
-Application by spraying of a coat of twin-component diluted polyurethane varnish, diluted with solvent.
The performance parameters of:
resistance to QUV;
corrosion resistance;
thickness when dry;
tint, remain common to the two cycles.

Painting techniques performances for aluminium
In order to ensure quality and high resistance of items over time, painting products have the following performance features:

Resistance to QUV
ΔE less than 2 after 2,000 hours of exposure in compliance with UNI ISO 11507 test.
This value is certified with a certificate issued by an independent body.

Resistance to rusting
Resistance to saline mist test greater than 1,500 hours in compliance with UNI ISO 9227 test
This value is certified with a certificate issued by an independent body.

Standard painting cycle for aluminium
-Micro-sandblasting with stainless steel grains (*only for elements in cast and die cast*).
-Chemical pre-treatment with product cycle based on nanotechnology.
-Application of a coat of powdered epoxy primer.
-Application of a coat of twin-component Polyurethane Varnish.