

With unique aesthetic inspired by the design of indoor ceiling lights, Chara collection complements historical and contemporary looking surroundings. Four different standard distributions can fulfil most requirements, whilst the softly lit transparent cylinder adds character to any lighting scheme.



CHARA COLLECTION

Design: Studio ATA,
Clem François Fiorentini,
Alfredo Farnè

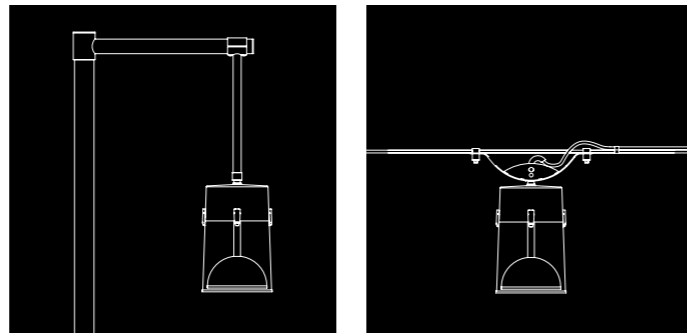
Chara is a suspended luminaire and can be installed – due to its fixing method – on brackets, wire, tige or chain to light streets, squares, parks, but also porches and entrance halls.

Materials

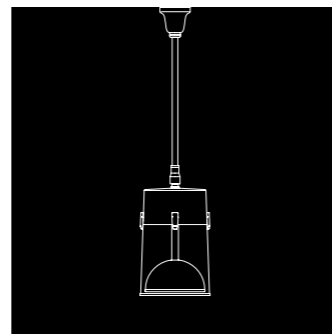
The posts part of the collection are made of steel, with components made of cast iron, while the luminaire is made of cast aluminium with a PMMA cylinder and prismatic flat glass.

Finishes

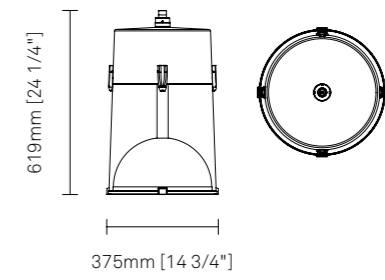
The standard colour is the so-called Neri Grey that is obtained from a chromatic combination, which has been developed after a long aesthetic research. Posts are painted using a water-based and highly eco-friendly process.



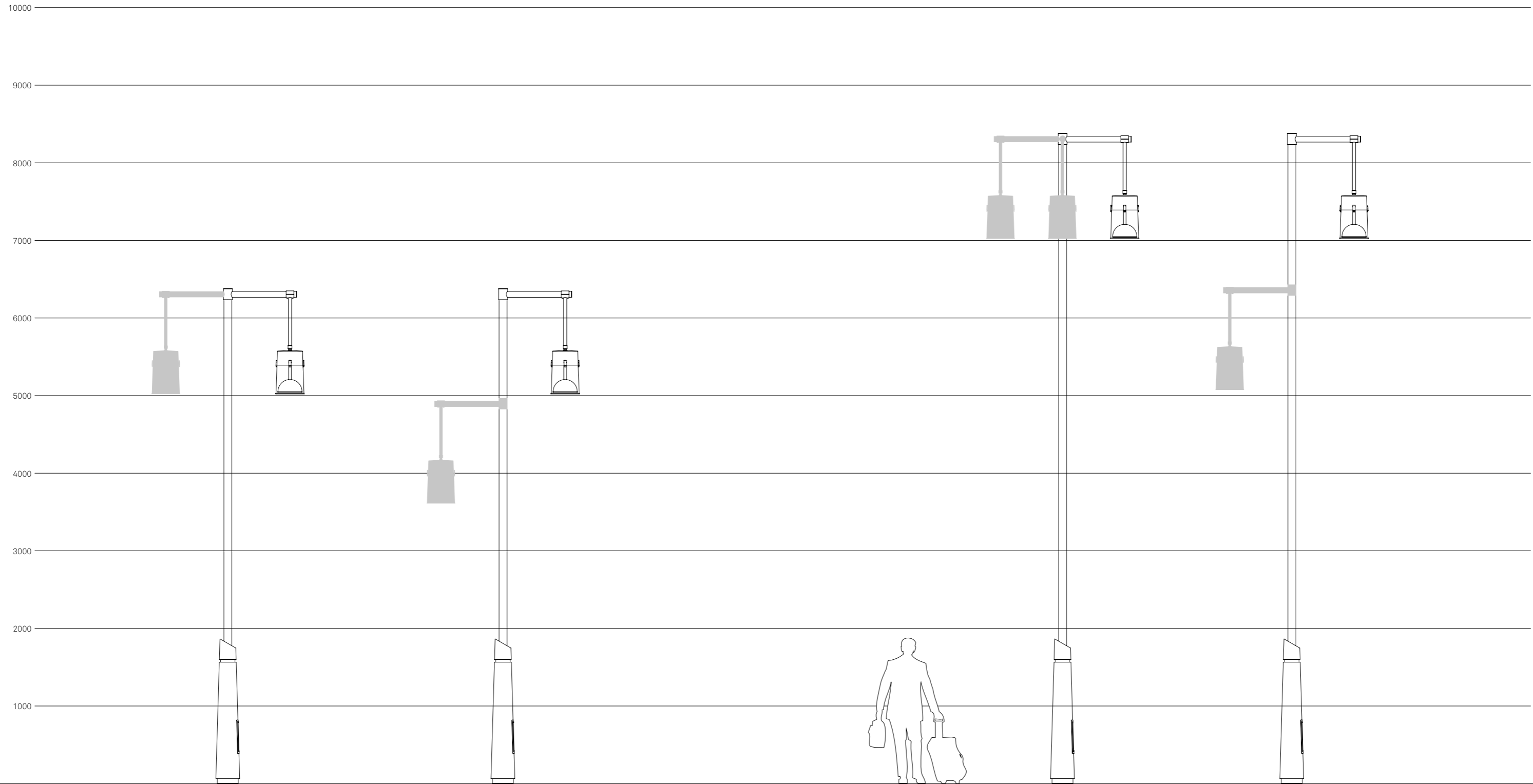
Fixing methods: top left on bracket, top right on wire, bottom right on tige.



CHARA COLLECTION



- Mounting: suspended
- Materials: cast aluminium, PMMA and glass
- Finishes: Neri Grey
- Opening system for PMMA screen without tools
- Electrical components on a removable plate



Chara.01
Chara.02

Chara.01
with halfway bracket

Chara.03

Chara.03
with halfway bracket



Luminaire main features

- No tools opening system
- LED optics: multilayer lenses
- CCT: 3,000K and 4,000K
- Reflector for flow recovery and prismatic glass to reduce glare
- Surge protection: up to 10kV/10kV
- Estimated life: 100,000h, L90B10

APPLICATIONS

Roads

High efficiency and reduced glare are guaranteed for the different road optics.

Squares and parks

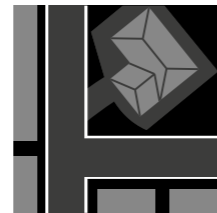
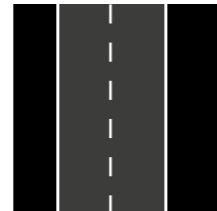
Uniform light with high colour rendering makes public spaces pleasant and safe to enjoy.

Pedestrian and cycling paths

Light is concentrated on the path, so that disturbances and visual pollution of green areas are prevented. Effective illumination is guaranteed in harmony with the surroundings.

Residential areas, retail, offices

The combination of functionality and aesthetics allows the product to integrate easily in architectural contexts, either outdoors or indoors.



LIGHT SOURCE

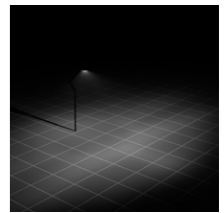
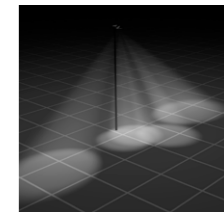
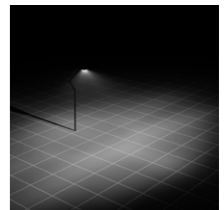
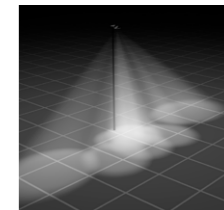
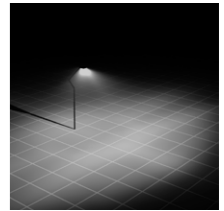
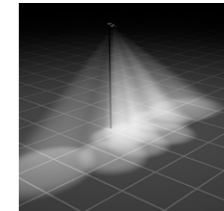
The optical system is composed of overlapping PMMA lenses with high performance and constant light transmission.

Chara is equipped with highly efficient latest generation of LED Cree XPL positioned on a ceramic base to provide high thermal conductivity and electrical insulation for a longer service life.

The wide emission surface and the perimeter reflector increase the emission efficiency maintaining reduced glare values.

Customised distributions of light can be obtained thanks to the flexibility in composing the lenses.

Reduced glare thanks to the wide emission surface. Latest generation LED Cree XPL and PMMA multilayer lenses provide high and constant performance over time, even in case of failure of a single source.



On the left, from top to bottom, diagrammatic views of LEDs without multilayer lenses. On the right, from top to bottom, LEDs with multilayer lenses.

**PERFORMANCE:
ENERGY SAVING**

Proper management of electronic luminous flux means benefits in terms of energy saving and life cycle of the product.

Thanks to electronic ballasts equipped with intelligent systems, the lighting management guarantees high energy savings. The driver chosen for Chara can be equipped with the features listed below:

NCL (Neri Constant Lumen)

Keeping flows consistent

The driver allows the initial flow to be kept consistent throughout the product life cycle by calibrating the current supply of the LEDs and ensuring the same luminous flux over time.

NVL (Neri Variable Lighting)

Stand-alone setting

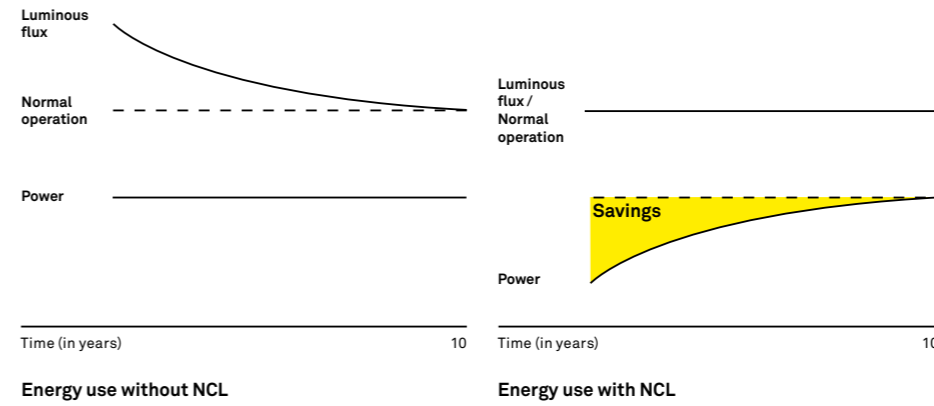
The driver is equipped with a stand-alone control that automatically adjusts the light flow to one or more levels during the operational period, which is automatically set according to the seasons.

DALI, 1-10V

Remote lighting management system

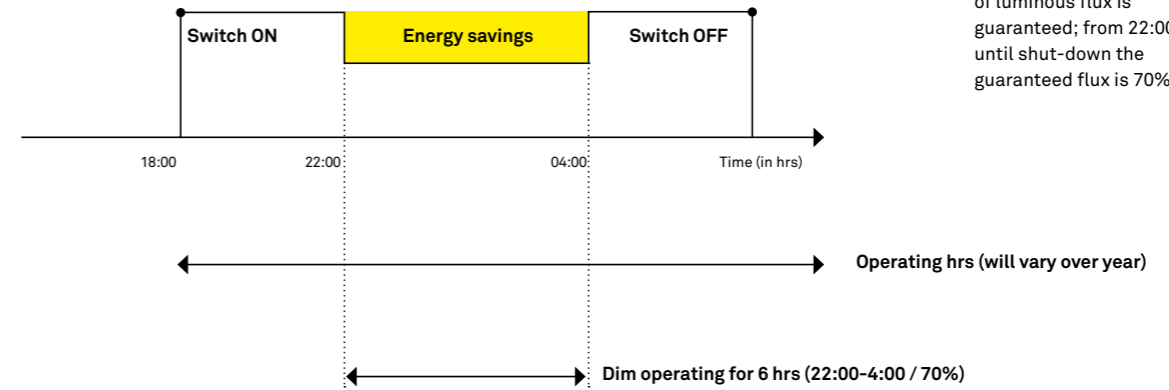
With the two-way digital DALI protocol lighting levels can be adjusted, consumption and system diagnostics monitored. By the analog signal 1-10V, the illumination levels regulation is enabled. Inside the products on the cabling board, space has been made to accommodate an electronic unit for remote management functionalities.

NCL - KEEPING FLOWS CONSISTENT



The light output of the system is kept consistent throughout the life of the product by acting on the current supplied and compensating for the decay of the source.

NVL - STAND-ALONE SETTING



Dimming preset cycle: from the switching on to 22:00 the 100% of luminous flux is guaranteed; from 22:00 until shut-down the guaranteed flux is 70%.



TECHNICAL FEATURES

Fixing

- Suspended with G3/4" male threaded attachment

Materials

- Die-cast aluminium, aluminium sheet and extrusion, brass
- PMMA cylinder
- Prismatic flat glass
- Stainless-steel fasteners
- Internal reflector made of PC

Finishes

- Standard colour Neri Grey

Main components

- Upper cylindrical frame in die-cast aluminum with quick brass connection and G3/4" threaded tube for fixing to the support, complete with internal cable gland
- Gasket in silicone between the upper and bottom frames
- Cylindrical screen in polymethyl methacrylate (PMMA) with glass bottom
- Internal tilting frame made of anodized aluminum sheet that can be opened by clips to access the auxiliary compartment, made up of a wiring plate, a hemisphere with reflector inside and a connecting pipe.

Electrical auxiliaries

- Programmable electronic power supply with auto diagnostic function
- Terminals wires max. section of 2.5mm²
- Power supply cable intake through Ø 14mm tube
- Cable grommet
- Standard surge protection for differential/common mode 6kV/10kV and 10kV/10kV in presence of additional protections (on demand).

Power supply

- Estimated life (EN 62722-2-1, LM80 data): 100,000h L90B10 (T_q= 25°C)

TECHNICAL FEATURES: LED MODULE

MAIN TECHNICAL DATA

CE 

SUPPLY VOLTAGE

120V-277V, 50/60Hz frequency

SURGE PROTECTION

Standard surge protection for differential/common mode 6kV/10kV and 10kV/10kV in presence of additional protections (on demand).

POWER SUPPLY

Programmable Electronic

POWER FACTOR CORRECTION

PFC > cos φ 0.9

ELECTRICAL INSULATION

Class II

ENCLOSURE PROTECTION

Water and dust IP65

Mechanical impacts IK08

PLANNING INFORMATION

For information related to the combinations between flux size options, power and colour temperature see the web site -

Neri SpA reserves the right to modify its products and documentation without obligation to give prior warning

SCREEN SHAPE

PRISMATIC FLAT GLASS

OPTIC SYSTEM

TYPE I – NLG 28

TYPE III – NLG 25

TYPE IV – NLG 24

TYPE V – NLG 18

IES CLASS

Cutoff

Semi Cutoff

Cutoff

Cutoff

COLOUR TEMPERATURE

3,000K

4,000K

FLUX SIZE OPTIONS

3,000K	3,500lm	27W	130lm
3,000K	4,500lm	35W	129lm
3,000K	6,000lm	47W	128lm
3,000K	7,500lm	60W	125lm
4,000K	3,500lm	26W	135lm
4,000K	4,500lm	33W	136lm
4,000K	6,000lm	45W	133lm
4,000K	7,500lm	58W	129lm

DRIVER FUNCTIONS

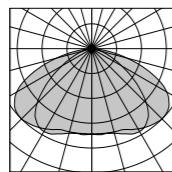
NCL

1-10V

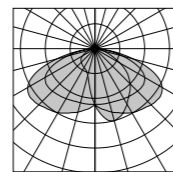
DALI

NVL

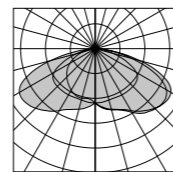
TYPE I – NLG 28



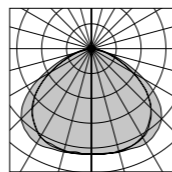
TYPE III – NLG 25



TYPE IV – NLG 24



TYPE V – NLG 18





HIGHLIGHTS

Main features

- Chara is both a 'Decorative' and 'Comfort' category luminaire
- Designed in full compliance with the lighting standards, with minimal energy consumption, using LEDs and high performance optical solutions
- Designed to reduce glare, without compromising the lighting effectiveness

Flux sizes

- The main factors in lighting design are system flux and photometry
- Neri presents products with their flux sizes and photometries, to ensure values and geometries remain constant over time

This approach allows:

- Same flux regardless of solution chosen
- Adoption of best technology on the market

Multilayer

Chara adopts a technology with multilayer lenses:

- Each LED is associated with a lens
- All lenses are equal and cover the entire area to be illuminated; in case of failure of a single source, there is no loss in the uniformity of illumination on the ground

Light emitting area

The glaring effect, typical of the individual point sources, is drastically reduced due to some technical devices:

- Prismatic flat glass
- White color PCB
- Perimeter reflector
- Large light emitting area

VERSIONS AND CODES

In order to configure the luminaire, type of optic, luminous flux related to colour temperature and driver functions need to be chosen. Their related codes have then to be added in sequence, one after another, following the order of the tables below, starting from type of mounting (**SN020L**), optic (eg: **18**), luminous flux (eg: **1C1**) and driver (eg: **02**). The code of the chosen configuration will be: **SN020L 18 1C1 02**.

Chara – Decorative and comfort

CODE	Mounting	CODE	Optic	CODE	CCT	Flux	CODE	Driver functions
SN020L	G3/4	28	Type I	1C1	3,000K	3,500lm	02	1-10V + NCL
		25	Type III	1C2	3,000K	4,500lm	06	DALI + NCL
		24	Type IV	1C3	3,000K	6,000lm	14	NVL + NCL
		18	Type V	1C4	3,000K	7,500lm		
				3C1	4,000K	3,500lm		
				3C2	4,000K	4,500lm		
				3C3	4,000K	6,000lm		
				3C4	4,000K	7,500lm		



Neri S.p.A.
S.S. Emilia 1622
47020 Longiano (FC) · Italy
T +39 0547 652111
F +39 0547 54074

Neri France S.à.r.l.
3, rue du Colonel Moll
75017 Paris · France
T +33 1 42 79 57 43

Neri North America Inc.
1547NW 79th Avenue
Miami, FL 33126, USA
T +1 786 315 4367
F +1 786 693 7763

Neri Lighting India Pvt. Ltd.
181 Evoma
14 Bhattaralli · K R Puram
Bengaluru · 560 066
T +91 80 3061 3658

Neri S.p.A. (DMCC Branch)
29-29 Reef Tower Cluster O
JLT – Jumeirah Lake Towers
P.O. Box: 5003348 · Dubai · UAE
T +971 4 448 7246
F +971 4 448 7112

