

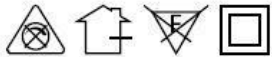
**NERO SURFACE SQUARE 12W**

NERO SURFACE SQUARE LED DOWNLIGHT

Indoor Luminaire

Product Code:

LNRO02S012SC / LNRO02S012SN / LNRO02S012SW  
12W - 1200lm - 6500K - CRI>80 Ra - Beam Angle 120°



**Technical Specifications**

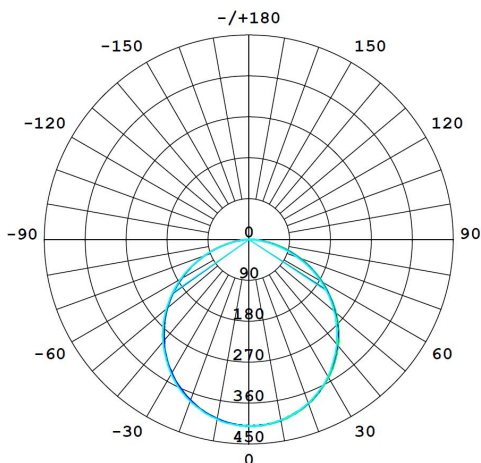
Operating Temperature	-10°C to 40°C
Rated Input Voltage & Frequency	230 VAC, 50Hz
Rated Input Wattage	12W ± 10%
Rated Input Current	0.058 Amp (Nominal)
Power Factor	≥0.90
ATHD	<15%
Rated Luminous Flux	1200 lm / 1140 lm / 1080 lm (tolerance as per BIS)
Rated Luminaire Efficacy	100 lm/W / 95 lm/W / 90 lm/W (tolerance as per BIS)
Correlated Color Temperature (CCT)	6500 K / 4000 K / 3000 K (tolerance as per ANSI)
Color Rendering Index (CRI)	>80 Ra
Beam Angle	120° (within the permissible limits)
Driver Efficiency	≥85%
LED Life Span	>50000 Hrs (Ta=25°C @L70)
Housing	AL. Housing
Lens / Reflector	PC. Diffuser
Mounting	Surface Mount

**Protections**

Over Voltage Protection	Withstand upto 440V/AC for 4 Hrs.
Surge Protection	±4.0KV
Protection Class	Class II
Ingress Protection (IP Rating)	IP20
Impact Protection (IK Rating)	IK02
Short Circuit Protection	Provided
Open Circuit Protection (No Load)	Provided
Reverse Polarity Protection	Provided

All technical data is subject to industry-standard tolerances.

# Light Distribution

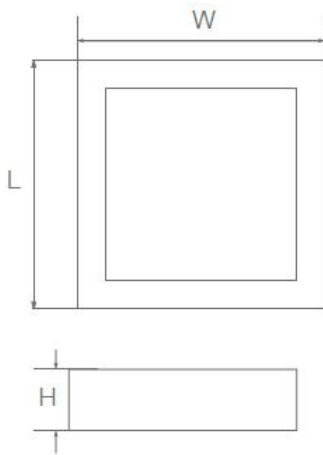


## UGR Table

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions	Viewed crosswise					Viewed endwise					
x = 2H y = 2H	24.2	25.7	24.5	25.9	26.1	24.1	25.6	24.4	25.8	26.0	
3H	25.8	27.2	26.1	27.5	27.7	25.6	27.0	25.9	27.3	27.5	
4H	26.5	27.8	26.8	28.1	28.3	26.2	27.5	26.5	27.8	28.1	
6H	27.0	28.3	27.3	28.6	28.8	26.6	27.9	26.9	28.1	28.4	
8H	27.2	28.4	27.6	28.7	29.0	26.7	27.9	27.1	28.2	28.5	
12H	27.3	28.5	27.7	28.8	29.1	26.8	27.9	27.1	28.2	28.5	
4H	2H	24.8	26.2	25.1	26.4	26.7	24.7	26.1	25.1	26.3	26.6
3H	26.6	27.8	27.0	28.1	28.4	26.5	27.6	26.8	27.9	28.2	
4H	27.5	28.5	27.8	28.8	29.2	27.2	28.3	27.6	28.6	28.9	
6H	28.1	29.1	28.5	29.4	29.8	27.7	28.7	28.1	29.0	29.4	
8H	28.4	29.3	28.8	29.6	30.0	27.9	28.8	28.3	29.1	29.5	
12H	28.6	29.4	29.0	29.8	30.2	28.0	28.8	28.4	29.2	29.6	
8H	4H	27.7	28.6	28.2	29.0	29.4	27.5	28.4	27.9	28.8	29.1
6H	28.6	29.3	29.0	29.7	30.1	28.2	28.9	28.6	29.3	29.7	
8H	28.9	29.6	29.4	30.0	30.5	28.4	29.1	28.9	29.5	29.9	
12H	29.2	29.8	29.7	30.3	30.7	28.6	29.1	29.1	29.6	30.1	
12H	4H	27.7	28.6	28.2	28.9	29.4	27.5	28.3	28.0	28.7	29.1
6H	28.6	29.3	29.1	29.7	30.2	28.3	28.9	28.7	29.3	29.8	
8H	29.0	29.6	29.5	30.1	30.5	28.5	29.1	29.0	29.6	30.0	
Variations with the observer position at spacings (CIE Pub.117) :											
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.3					

## Product Dimensions (L x W x H)

175 X 175 X 35mm (Tol.±5 mm)



## Applications

Residences, Offices, Small Retail Shops, Hotels, Coffee Shops, Restaurants, Hospitals, area lighting and for other indoor applications.