

LED Downlight ND191 E-198E

13W/14W/29W/39W

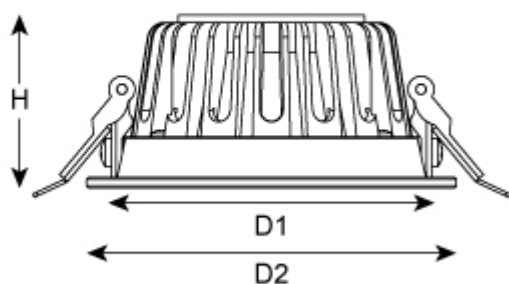
Features

- 13W / 14W / 29W / 39W LED Downlight
- Recessed round, uniform distribution
- Ideal replacement up to 70W HID downlight
- Beam angle: 60°
- Cut out diameters Ø100mm / Ø135mm / Ø170mm / Ø210mm
- Dimmable as option
- Special color spectrum for aquarium, agriculture and food display, available on request
- Color Rendering Index: ≥80



Diagrams

Dimensions:

	(Unit : mm)	(D1)	(D2)	(H)
	ND191	Ø100 x	Ø105 x	47
	ND192	Ø100 x	Ø105 x	47
	ND193	Ø135 x	Ø140 x	59
	ND194	Ø135 x	Ø140 x	59
	ND195	Ø170 x	Ø190 x	59
	ND196	Ø170 x	Ø190 x	59
	ND197	Ø210 x	Ø230 x	72
	ND198	Ø210 x	Ø230 x	72

ND19 Front View:

ND192, ND191



ND194, ND193



ND196, ND195



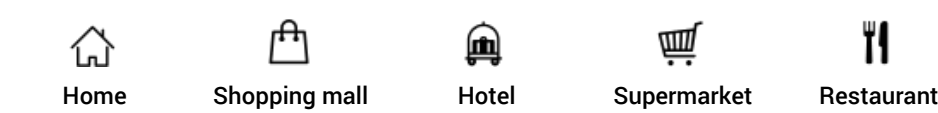
ND198, ND197

ND19 Back View:**ND19 Bottom View:****ND191, ND193
ND195, ND197****ND192, ND194
ND196, ND198**

Standards



Applications



Technical Data	
Electrical	
Rated Wattage [W]	13W / 14W / 29W / 39W
Rated Voltage [V/Hz]	100-240V, 50/60Hz
Power Factor @230V	0.95
Input Current [mA] @230V	59 / 64 / 133 / 178
LED	COB
Model	
ND191E-13W/8XX	13W (COB 11W, 300mA, 36±2Vdc, 1340-1440lm)
ND192E-13W/8XX	13W (COB 11W, 300mA, 36±2Vdc, 1340-1440lm)
ND193E-14W/8XX	14W (COB 13W, 350mA, 36±2Vdc, 1470-1570lm)
ND194E-14W/8XX	14W (COB 13W, 350mA, 36±2Vdc, 1470-1570lm)
ND195E-29W/8XX	29W (COB 25W, 700mA, 36±2Vdc, 2880-3020lm)
ND196E-29W/8XX	29W (COB 25W, 700mA, 36±2Vdc, 2880-3020lm)
ND197E-39W/8XX	39W (COB 32W, 900mA, 36±2Vdc, 3860-4040lm)
ND198E-39W/8XX	39W (COB 32W, 900mA, 36±2Vdc, 3860-4040lm)
Luminous Flux [lm]	
13W	930lm / 880lm @3000K
	970lm / 920lm @4000K
	1010lm / 960lm @6500K
14W	1030lm / 980lm @3000K
	1080lm / 1030lm @4000K
	1130lm / 1080lm @6500K
29W	2130lm / 2020lm @3000K
	2190lm / 2080lm @4000K
	2250lm / 2140lm @6500K
39W	2930lm / 2780lm @3000K
	3020lm / 2870lm @4000K

3110lm / 2960lm @6500K

Performance

SDCM	<6
Efficacy [lm/W]	68-81
Color Rendering Index [Ra]	≥80
Beam Angle [°]	60
Rated Life, Ta@25°C [hrs]	50,000
Lamp Survival Factor at 6000hrs	>0.9
Lumen Maintenance at 6000hrs	>0.8
Number of Switching Cycles Before Failure	>15,000
Starting Time [S]	<0.5
Warm Up Time [S]	<2
Premature Failure At 1000hrs	<5%

Mechanical

Diameter D [mm]	Ø105 / Ø105 / Ø140 / Ø140 / Ø190 / Ø190 / Ø230 / Ø230
Height H [mm]	47 / 47 / 59 / 59 / 59 / 59 / 72 / 72
Cut out diameter [mm]	Ø100 / Ø100 / Ø135 / Ø135 / Ø170 / Ø170 / Ø210 / Ø210
Material	Body: Die-cast aluminium
	Trim: Die-cast aluminium
	Reflector: High purity, anodized aluminium
	Diffuser: Frosted PS, UV protected

Standard Compliance

CE-LVD	EN60598-1, EN60598-2-2
CE-EMC	EN55015, EN61547, EN61000-3-2, EN61000-3-3
Mercury Content [mg]	0.0
Electrical Class	II

Other

Dimmable [Y/N]	Optional
Operation Temperature	-10°C ~ 40°C
Storage Temperature	-20°C ~ 60°C