

LED Downlight ND291 E-299E

9W

Features

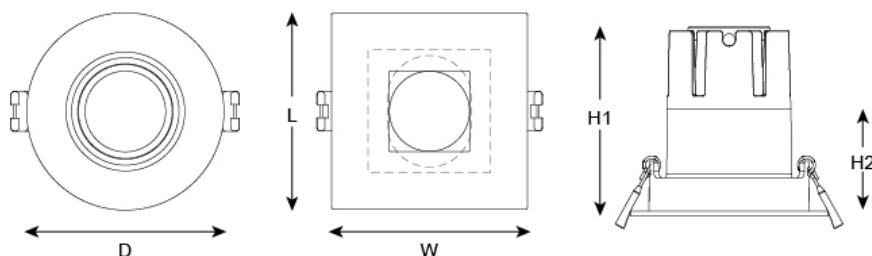
- 9W LED Downlight
- Recessed round, uniform distribution
- Twist-lock changeable LED module for inventory cost saving
- Ideal replacement up to 100W halogen downlight
- Adjustable tilting angle of $\pm 23^\circ$ vertically (ND293E, ND294E, ND296E, ND297E, ND298E)
- Beam angle: $20^\circ / 30^\circ / 38^\circ / 50^\circ$
- Cut out dimensions $\varnothing 75\text{mm} / 75 \times 75\text{mm}$
- Good color rendition, $R_a \geq 80 / 90$



ND291E

Diagrams

Dimensions:



(Unit : mm)	(D)	(H1)	(H2)	Cut Out Dimensions
ND291E	$\varnothing 88$	x 85	x 48	$\varnothing 75$
ND292E	$\varnothing 88$	x 85	x 48	$\varnothing 75$
ND293E	$\varnothing 88$	x 85	x 48	$\varnothing 75$
ND294E	$\varnothing 88$	x 85	x 48	$\varnothing 75$
ND297E	$\varnothing 88$	x 101	x 64	$\varnothing 75$
ND298E	$\varnothing 88$	x 105	x 68	$\varnothing 75$

(Unit : mm)	(L)	(W)	(H1)	(H2)	Cut Out Dimensions
ND295E	88	x 88	x 85	x 48	$\varnothing 75$
ND296E	88	x 88	x 85	x 48	$\varnothing 75$
ND299E	88	x 88	x 85	x 48	75×75

ND292E - ND299E:



Twist-lock changeable LED module:



Standards



IP20

IP54

Prosperity Lamps & Components Ltd.

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Applications



Home



Office



Shopping mall



Hotel



Supermarket



Restaurant



Gallery



Museum

Technical Data

Type of Light Source

Lighting Technology Used LED

Non-directional or Directional [NDLS/DLS] DLS

Mains or Non-mains [MLS/NMLS] MLS

Connected Light Source No

Color tunable light source No

Envelop [No/Second/Non-Clear] No

High Luminance Light Source No

Anti-glare Shield No

Electrical

Rated Wattage [W] 9W

On-mode Power [W] 9W

Standby Power [W] N/A

Networked Standby Power [W] N/A

Rated Voltage [V/Hz] 220-240V, 50/60Hz

Power Factor 0.9

Input Current [mA] @230V 43

Model

ND291E-9W/8XX 9W

ND292E-9W/8XX 9W

ND293E-9W/8XX 9W

ND294E-9W/8XX 9W

ND295E-9W/8XX 9W

ND296E-9W/8XX 9W

ND297E-9W/8XX 9W

ND298E-9W/8XX 9W

ND299E-9W/8XX 9W

Luminous Flux (Useful Luminous Flux) [lm]

9W 760lm (740lm) @3000K

830lm (805lm) @4000K

920lm (890lm) @6500K

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Peak Luminous Intensity [cd]	
9W 20°	2700 @3000K
	3200 @4000K
	4100 @6500K
9W 30°	2500 @3000K
	3000 @4000K
	3900 @6500K
9W 38°	2300 @3000K
	2800 @4000K
	3700 @6500K
9W 50°	2100 @3000K
	2600 @4000K
	3500 @6500K
Performance	
SCDM	<6
Chromaticity coordinates [x, y]	0.44, 0.403@3000K / 0.38, 0.38@4000K / 0.312, 0.335@6500K
Efficacy [lm/W]	82-99
Color Rendering Index [Ra]	80 / 90
R9 colour rendering index value	2
Beam Angle [°]	20 / 30 / 38 / 50
Rated Life, Ta@25°C [hrs]	50,000
Lamp Survival Factor	0.9
Lumen Maintenance	0.96
Number of Switching Cycles Before Failure	25,000
Starting Time [S]	<0.5
Warm Up Time [S]	<2
Premature Failure At 1000hrs	<5%
Displacement Factor [cosØ]	0.5
Flicker Metric [Pst LM]	1
Stroboscopic Effect Metric [SVM]	0.4
Mechanical	
Diameter D [mm]	88(ND291E-ND294E, ND297E-ND298E)
Height H1 [mm]	85(ND291E-ND296E, ND299E) / 101(ND297E) / 105(ND298E)
Height H2 [mm]	48(ND291E-ND296E, ND299E) / 64(ND297E) / 68(ND298E)
Length L [mm]	88(ND295E-ND296E, ND299E)
Width W [mm]	88(ND295E-ND296E, ND299E)
Cut out dimensions [mm]	Ø75(ND291E-ND298E) / 75 x 75(ND299E)
Material	Body: Die-cast aluminium
	Trim: Die-cast aluminium
	Reflector: High purity, anodized aluminium
Standard Compliance	
CE-LVD	EN60598-1, EN60598-2-2
CE-EMC	EN55015, EN61547, EN61000-3-2, EN61000-3-3

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Environment	RoHS
Mercury Content [mg]	0.0
Energy Class	3000K / 4000K / 6500K
9W	F / F / E
Electrical Class	II
Other	
Dimmable [Yes/Only with specific dimmers/No]	No
Operation Temperature	-10°C ~ 40°C
Storage Temperature	-20°C ~ 60°C
Energy Consumption in on-mode [kWh/1000h]	9kWh