



# TrueForce LED Public (Urban/Road – HPL/SON)



## TForce LED HPL ND 28-21W E27 830

MASTER, LED HPL, Corn cob, EM/Mains, 21 W, HPL 50W, SON 50W, E27, 3000 K, 2850 lm, CRI 80, 50000 h

Philips TrueForce LED lamps provide an easy LED solution with a fast payback to replace High-Intensity Discharge (HID) and High-Pressure Sodium (SON) lamps. These post-top lamps bring the energy efficiency and long lifetime benefits of LED-to-HID replacement, delivering instant savings for a low initial investment. With the right lamp size and light distribution, customers can easily retrofit TrueForce LED lamps into their existing HPL and SON system, thereby enhancing the light quality with LED HID, without having to change the fixtures or sacrifice the light effect.

### Warnings and Safety

- Installation should always be performed by a qualified electrician or installer. Use the installation guide for instructions
- <https://www.assets.signify.com/is/content/Signify/phl-led-hid-eu-compatibility-list-professional>

### Product data

General Information		Light Technical	
Cap base	E27	Colour Code	830 [CCT of 3000K]
Nominal lifetime	50,000 h	Beam angle (nom.)	360 degree(s)
Switching Cycle	50,000	Luminous Flux	2,850 lm
Lighting Technology	LED HPL	Colour designation	White (WH)
Flux measurement reference	Sphere	Correlated Colour Temperature (Nom)	3000 K
		Luminous efficacy (rated) (nom.)	135 lm/W

## TrueForce LED Public (Urban/Road – HPL/SON)

Colour consistency	<6
Colour rendering index (CRI)	80
LLMF at end of nominal lifetime (nom.)	70 %
Photobiological safety according to EN 62471	RG1

### Operating and Electrical

Line Frequency	50 to 60 Hz
Input frequency	50 to 60 Hz
Power Consumption	21 W
Lamp current (nom.)	95 mA
Starting time (nom.)	0.45 s
Warm-up time to 60% light	0.45 s
Power Factor (Fraction)	0.95
Voltage (nom.)	220-240 V
Inrush current at mains	4.03
Max. lamp no. on MCB B type 10A – Mains	58
Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor.	58
Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.	8
Max. lamp no. on MCB B type 16A – Mains	93
Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor.	93
Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.	14
Wattage Equivalent (LED HID only)	HPL 50W, SON 50W
Ballast Compatibility	EM/Mains

### Temperature

T-Case maximum (nom.)	55 °C
-----------------------	-------

### Controls and Dimming

Dimmable	No
----------	----

### Mechanical and Housing

Lamp Finish	Clear
Bulb material	Plastic
Bulb shape	Corn cob
Net Weight (Piece)	0.370 kg

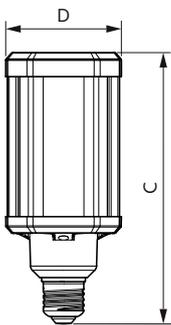
### Approval and Application

Energy Efficiency Class	D
Energy-saving product	Yes
Energy consumption kWh/1,000 hours	21 kWh
EPREL Registration Number	403568
CE mark	Yes
EU RoHS compliant	Yes
Flickering value (PstLM)	1
Stroboscopic effect	1.6
Ambient temperature range	-30 to +45 °C

### Product Data

Order product name	TForce LED HPL ND 28-21W E27 830
Full product name	TForce LED HPL ND 28-21W E27 830
Full EOC	871869963814600
Order code	929002006102
Material no. (12 NC)	929002006102
Numerator – quantity per pack	1
EAN/UPC – Product/Case	8718699638146
Numerator – packs per outer box	6
EAN/UPC – Case	8718699638153

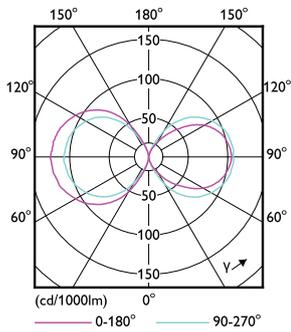
## Dimensional drawing



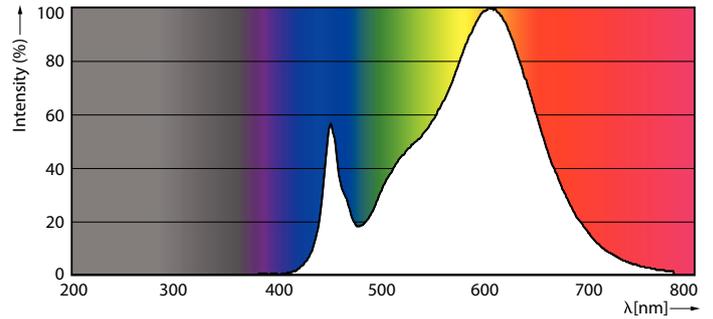
Product	D	C
TForce LED HPL ND 28-21W E27 830	75 mm	178 mm

# TrueForce LED Public (Urban/Road – HPL/SON)

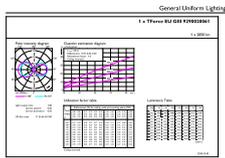
## Photometric data



Light Distribution Diagram - TForce LED HPL ND 28-21W E27 830



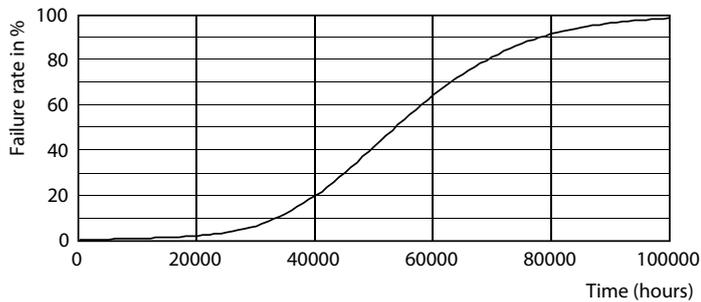
Spectral Power Distribution Colour - TForce LED HPL ND 28-21W E27 830



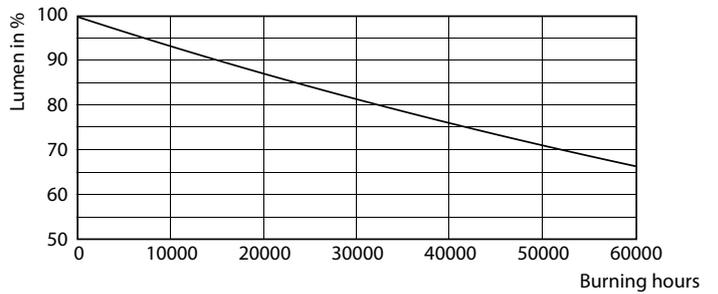
General Uniform Lighting  
TForce LED HPL ND 28-21W E27 830  
Page 11

General uniform lighting - TForce LED HPL ND 28-21W E27 830

## Lifetime



LEDTrueForce Others 360



Lumen Maintenance Diagram - TForce LED HPL ND 28-21W E27 830

## TrueForce LED Public (Urban/Road – HPL/SON)

