



## UNISTREET GEN2 MINI

### BGP282 LED-HB/740 II DN11 16000 lm

#### Introduction

Designed for large-scale ledification projects, the UniStreet gen2 is the ideal 1:1 luminaire replacement for municipalities. Thanks to its high efficiency and low initial cost, the UniStreet gen2 luminaire enables a fast payback and significant savings in terms of energy consumption within a short period of time. The ease of installation and maintenance is enabled by the Philips Service tag and the Philips SR (System Ready) socket makes it future-ready and you can pair this luminaire with lighting control and software applications such as Interact City. Available with a number of different optics and lumen packages that can even be tuned further to fit exact project requirements, UniStreet gen2 is a true point-to-point replacement solution for conventional light sources. The compact luminaire, using high-quality materials is also easy to dismantle and recycle at the end of its lifetime.

#### **Additional text**

*Optics: Distribution Narrow 11 – DN11 (medium wide asymmetric optics)*

*Universal for diameter 48 - 60 mm*

*Surge Protector Device (SPD): Luminaire surge protection level 10kV*

*Service Tag – QR/Bar code*

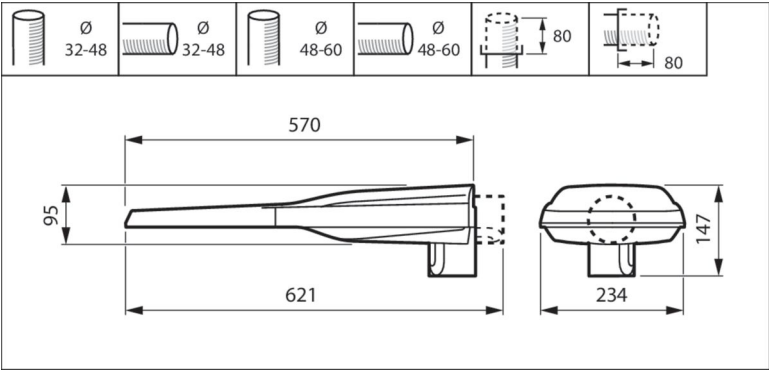
*Optical cover: Flat tempered glass*

*ENEC certificate*

## Product Information

Product Family Code				BGP282					
Mechanical and Housing									
Housing Material				Aluminum die cast					
Fixation material				Aluminum					
Ingress protection code				IP66					
Mech. impact protection code				IK08					
Corrosion resistance				500 hours Salt Spray Test for standard version, 1.000 hours. Salt Spray Test optional Marine Salt Protection (MSP)					
Certification									
CE mark				CE mark					
ENEC mark				ENEC plus mark					
RoHS mark				-					
WEEE mark				-					
Protection class IEC				II					
Service									
Warranty period				5 years					
Serviceability				Class A, luminaire is equipped with serviceable parts (when applicable): LED board, driver, control units, surge protection device, optics, front cover and mechanical parts					
Light source replaceable				Yes					
Operating ambient temperature range Tamb				-40 to +50 °C					
Performance ambient temperature (Tq)				25 °C					
L-Value				L80					
Lifetime				100000 h					
Surge protection				6KV in Common or Differential mode as standard, 10KV with optional Surge Protector Device (SPD)					
IPEA - Energy classification									
Road		Large area		Historical centers		Green areas		Cycle & pedestrian	
IPEA	Class	IPEA	Class	IPEA	Class	IPEA	Class	IPEA	Class
1.6	A5+	1.9	A8+	2.05	A9+	1.56	A4+	1.56	A4+

Dimensional drawing(s) - mm



# Light technical Report

## Drivers

Description	Xi FP 110W 0.3-1.0A SNLDAE 230V C133 sXt
12NC	929002873206
Number of driver(s)	1
Number of luminaire per MCB 16A	10
Inrush current	47 A
Inrush time	250 µs
Input Voltage	220V-240V
Input Frequency	50/60 Hz
Current	877 mA
System power (minimum)	108 W
System power (maximum)	108 W
System power (average)	108 W
Power consumption tolerance	+/-10%
Power Factor (100%)	0.99
Power Factor (50%)	0.99
Connectivity	No connectivity
Dimming	No dimming

## Light engine

Light source engine type	LED
Number of LED	40
Initial LED luminaire efficacy (source)	148 lm/W
Initial LED luminaire efficacy (system)	133 lm/W
Light source colour	740 (Neutral White)
Init. colour Rendering Index	70
Init. CRI tolerance	+/-2
Init. Corr. colour Temperature	4000 K
Initial tolerance	+/- 180 K (5 SDCM)
End of life tolerance	+/- 255 K
Initial luminous flux (source)	16000 lm
Luminous flux tolerance	+/-7%
Initial luminous flux (system)	14366 lm
Photobiological risk	Risk group 0 (exempt) according to EN IEC 62471

## Optics

Optical configuration	DN11
LOR	0.90
ULR at tilt=0°	0.00%
G* at tilt=0°	G*3
Imax (at 90° and above)	0 cd/klm
CIE code	44 75 97 100 90

## Dimming range

Current percentage	Current (mA)	System power (minimum) (W)	System power (maximum) (W)	System power (average) (W)	Source flux (lm)	System flux (lm)
100	877	108	108	108	16000	14366
95	834	104	104	104	15419	13844
90	790	98	98	98	14800	13288
85	746	92	92	92	14159	12713
80	702	87	87	87	13494	12116
75	658	82	82	82	12807	11499
70	614	76	76	76	12097	10862
65	571	71	71	71	11366	10205
60	527	66	66	66	10613	9529
55	483	60	60	60	9840	8835
50	439	55	55	55	9047	8123
45	395	50	50	50	8235	7394
40	351	44.5	44.5	44.5	7404	6648
35	307	39.5	39.5	39.5	6555	5886
30	264	34.5	34.5	34.5	5688	5107
25	220	29	29	29	4805	4314
20	176	24	24	24	3905	3506
15	132	19	19	19	2991	2686
10	88	13.6	13.6	13.6	2062	1851

# Maintenance factor

Maintenance factor according ISO/CIE 22012 TS (2019)

The maintenance factor MF is determined using:

$$MF = LLMF \cdot SF \cdot LMF \cdot SMF$$

where

LLMF is the luminous flux factor

SF is the survival factor (=1 due to spot replacement regime)

LMF is the luminaire maintenance factor

SMF is the surface maintenance factor (=1 for outdoor lighting)

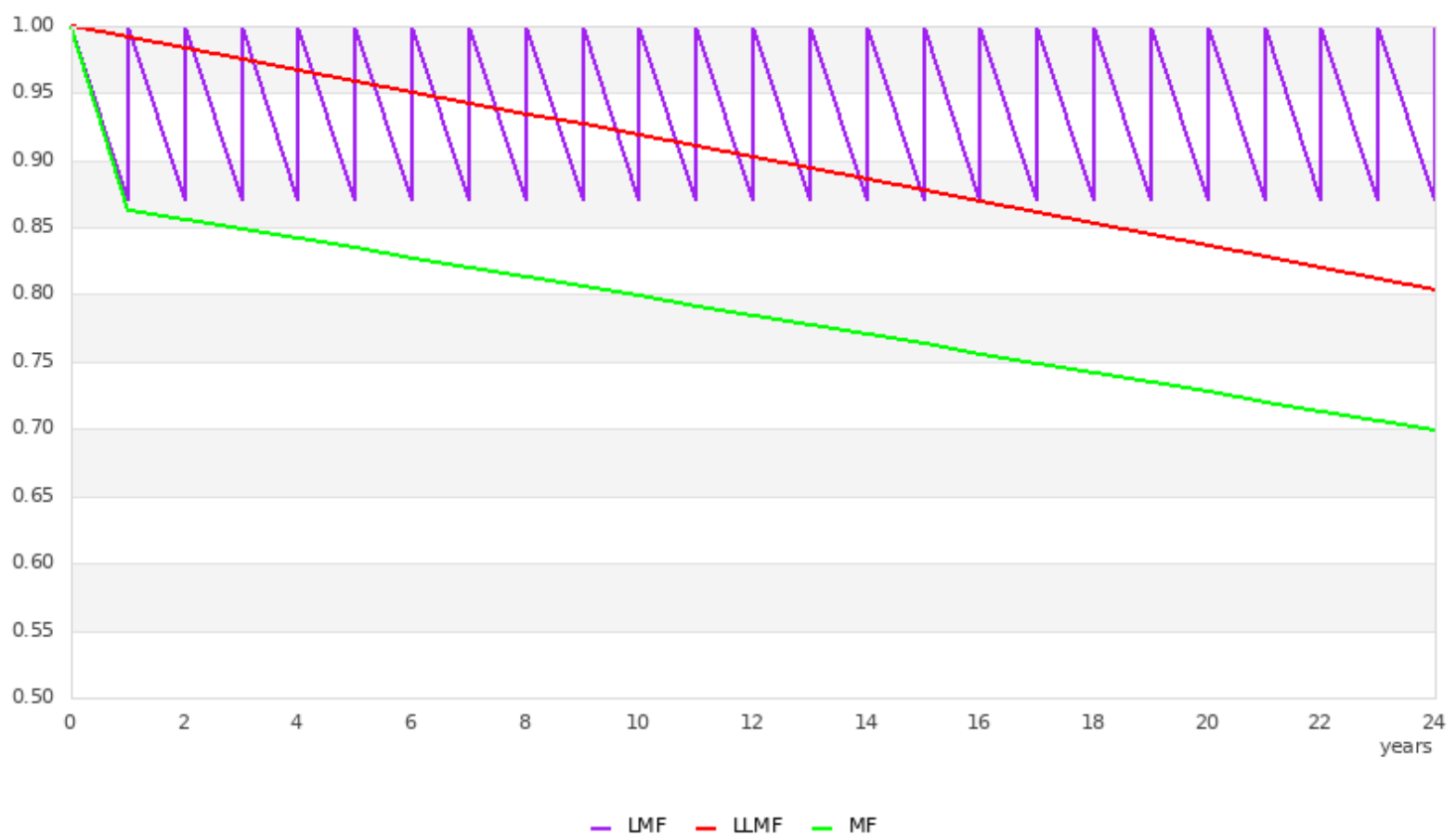
MF for 100000 hours (24.4 years) = 0.7

With

LLMF = 0.8

LMF = 0.87

and based on a cleaning cycle of 1 years and 4100 burning hours / year

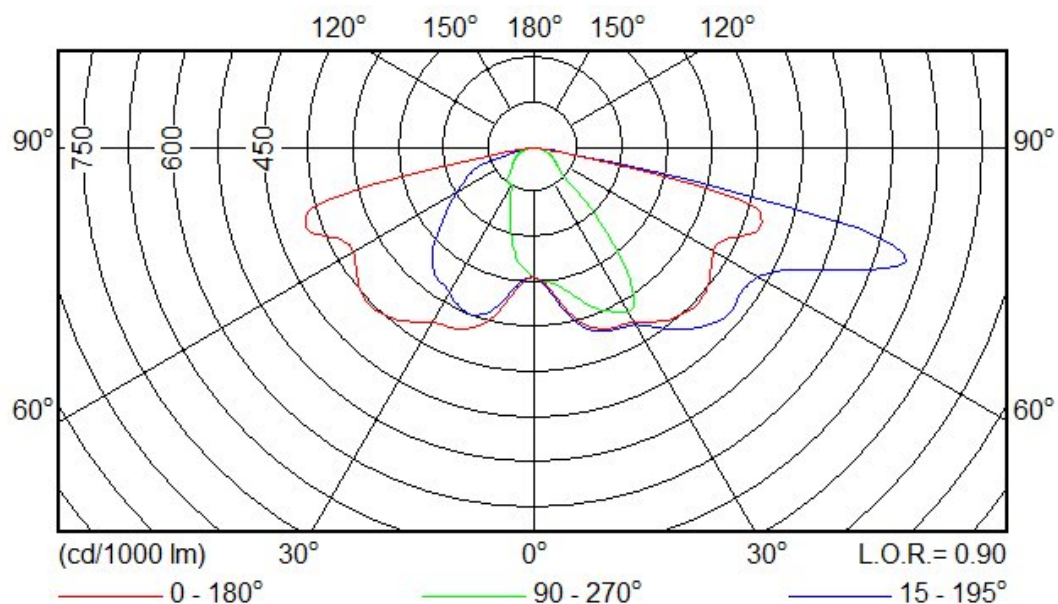




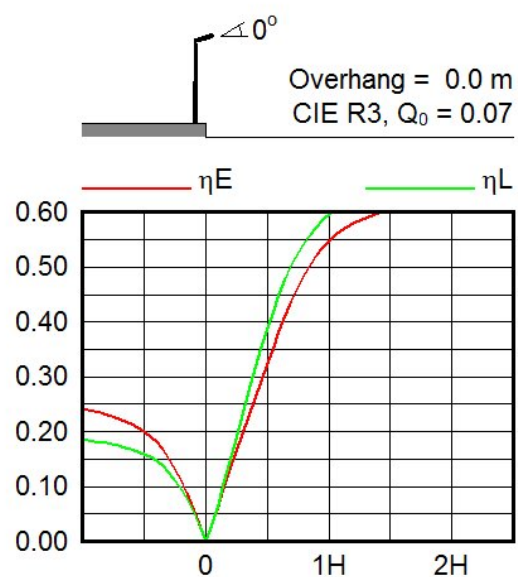


# Photometric Graphs

## Polar intensity diagram



## Utilisation factor curve and luminance yield diagram Relative isolux diagram



### Horizontal Illuminance $\angle 0^\circ$

H	$E_{max}$
(m)	(lux)
4.0	277
6.0	123
8.0	69

M.F. = 1.0

