



UNISTREET GEN2 MICRO

BGP281 LED85-4S/740 I DM11 CLO

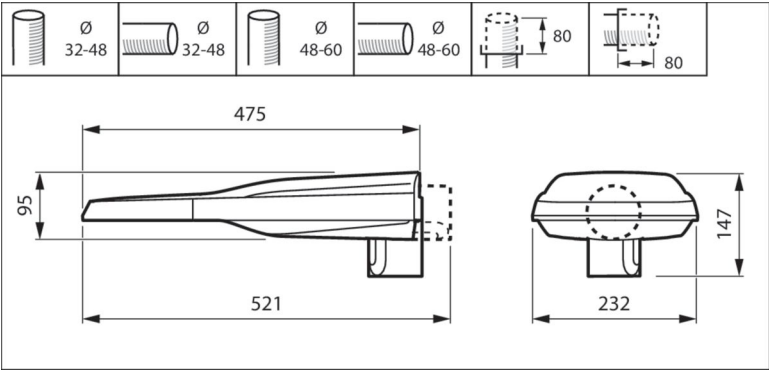
Introduction

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.

Product Information

Product Family Code				BGP281					
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				I					
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				1					
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
1.81	A7+	1.89	A7+	2.21	A11+	1.76	A6+	1.76	A6+

Dimensional drawing(s) - mm



Light technical Report

Drivers

Description	Xi FP 75W 0.3-1.0A SNLDAE 230V C133 sXt
12NC	929002872906
Number of driver(s)	1
Number of luminaire per MCB 16A	10
Inrush current	43 A
Inrush time	260 µs
Input Voltage	220V-240V
Input Frequency	50/60 Hz
Start Current	820 mA
End Current	867 mA
System power (minimum)	52 W
System power (maximum)	55 W
System power (average)	54 W
Power consumption tolerance	+/-10%
Power Factor (100%)	0.98
Power Factor (50%)	0.95
Connectivity	No connectivity
Dimming	Dynadimmer DDF2

Light engine

Light source engine type	LED
Number of LED	20
Initial LED luminaire efficacy (source)	154 lm/W
Initial LED luminaire efficacy (system)	132 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)	8000 lm
Luminous flux tolerance	+/-7%
Initial luminous flux (system)	6880 lm
Photobiological risk	Risk group 0 (exempt) according to EN IEC 62471

Optics

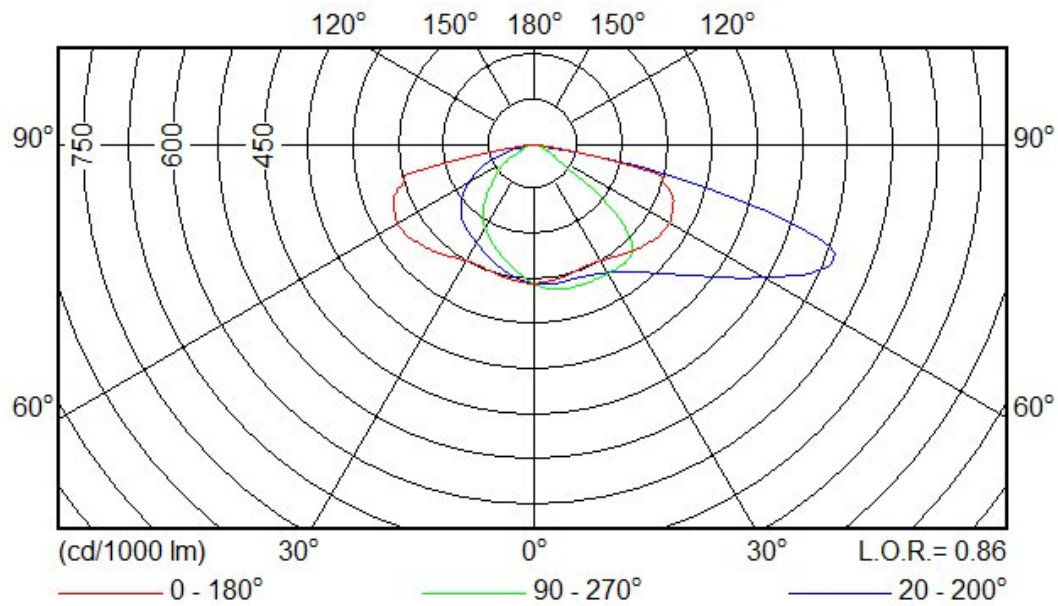
Optical configuration	DM11
LOR	0.86
ULR at tilt=0°	0.00%
G* at tilt=0°	G*2
Imax (at 90° and above)	0 cd/klm
CIE code	39 75 97 100 86

Dimming range

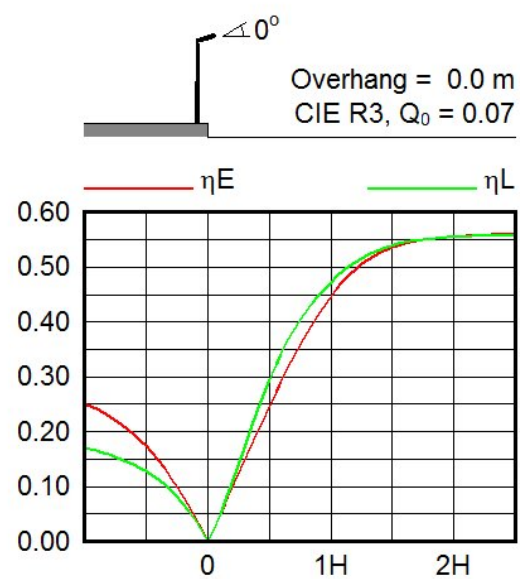
Current percentage	Current (mA)	System power (minimum) (W)	System power (maximum) (W)	System power (average) (W)	Source flux (lm)	System flux (lm)
100	820	52	55	54	8000	6880
95	779	49.5	52	51	7685	6686
90	738	47	49	48	7328	6375
85	697	44.5	46.5	45.5	6966	6130
80	656	42	43.5	42.5	6599	5807
75	615	39	40.5	40	6227	5480
70	574	36.5	38	37.5	5851	5149
65	533	34	35	34.5	5470	4868
60	492	31.5	32.5	32	5084	4525
55	452	29	30	29.5	4693	4177
50	410	26.5	27.5	27	4298	3825
45	369	24	24.5	24.5	3897	3468
40	328	22	22	22	3492	3108
35	287	19.4	19.8	19.6	3083	2744
30	246	17	17.2	17	2668	2375
25	205	14.4	14.6	14.4	2249	2002
20	164	12.2	12.4	12.2	1825	1624
15	123	9.8	9.8	9.8	1396	1242
10	82	7.2	7.3	7.3	962	856

Photometric Graphs

Polar intensity diagram



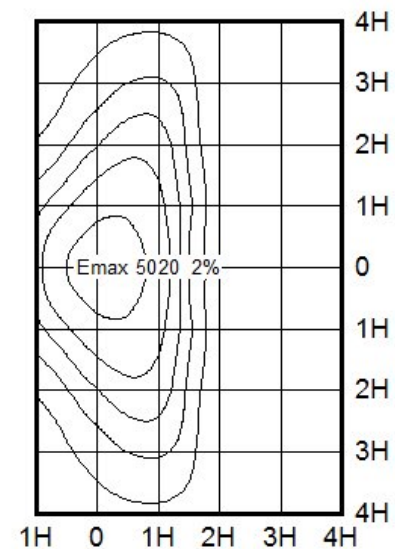
Utilisation factor curve and luminance yield diagram Relative isolux diagram



Horizontal Illuminance $\angle 0^\circ$

H	E_{max}
(m)	(lux)
4.0	119
6.0	53
8.0	30

M.F. = 1.0



Lab Information & Certification

Lab Information

Test standards

EN 13032-4:2015	Light and lighting. Measurement and presentation of photometric data of lamps and luminaires. Part 4: LED lamps, modules and luminaires
EN 13032-1:2014	Light and lighting. Measurement and presentation of photometric data of lamps and luminaires. Part 1: Measurement and file format
IEC 62717:2014+AMD1:2015	LED modules for general lighting - performance requirements
IES LM-79-08	IES Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products
IEC / EN 62722-1:2014	Luminaire performance - Part 1: General requirements
IEC / EN 62722-2-1:2014	Luminaire performance - Part 2-1: Particular requirements for LED luminaires

Test equipment

LMT GO-DS 2000 Goniometer (C/G)	☐
Yokogawa WT3000 power analyzer	☐
Chroma 6415 programmable AC source	☐
Agilent 6675A system DC power supply	☐
Integrating sphere U-101-A	☐
EM TEST NetWave3 AC/DC source	☐
FLUKE Norma 4000 power analyzer	☐
Sonopan L-100 luxmeter	☐
Gigahertz X1-3 hazard lightmeter	☐
Gigahertz XD-45-HB-4 Head	☐
Gigahertz XD-45-HUV-4 head	☐

MEASUREMENT UNCERTAINTIES

Type of test	Uncertainties
Luminous flux	+/- 2.2 %
Power	+/- 0.5 %
Imax	+/- 2.2 %
Beam angle of Imax	+/- 0.1°
Ambient temperature 0-50°C	+/- 0.1°C

.....
Signed-off by
Dariusz Pierzchanowski

DISCLAIMER: This photometry report is compiled based on real measurement done in Signify Laboratories during development and release of new products and calculation data pulled from PPS web-based tool and internal data. The values present in this report may differ from real values measured for specific product, but not more than +/-10 % on power and +/- 7% on lumen.

Certification

F-1289/13

CERTIFICATE

Ref.No. SMT/CTF-3/0001/3/2018

Supervised Manufacturers' Testing SMT Customer's Testing Facility CTF - Stage 3

It is hereby confirmed that the laboratory

Laboratory of Quality
Philips Lighting Poland Sp. z o.o. Piła
O/Kętrzyn, ul. Chrobrego 8, 11-400 Kętrzyn
POLAND

is authorized by ITE PREDOM Division to perform testing
for the certified body ITE PREDOM Division in the framework ENEC, ENEC+,
CCA agreements, IECEE CB Scheme and national certification
for the products and standards as referred in the Appendix to this certificate and
under conditions as mentioned in the Contract No. SMT/01/12 dated 10.10.2012
This procedure is fully in accordance with the following operational documents
IECEE OD-2048
OD ECS 035

The technical competence of the laboratory
has been checked according to
EN ISO/IEC 17025:2005

the proof has been given in the assessment carried out by ITE PREDOM Division
This certificate is valid if the laboratory observes the requirements of the above mentioned standard and Operational Documents
and under conditions of the Contract No. No. SMT/01/12 dated 10.10.2012

Manager of Certification Office ITE PREDOM Division  Joanna Walczak-Złotkowska	Deputy Director of ITE PREDOM Division  Aleksander Piotrowski
---	--

Warsaw, 2018-11-28



Instytut Technologii Elektronowej Oddział PREDOM
Institute of Electron Technology PREDOM Division
ul. Krakowiaków 53, 02-255 WARSZAWA, POLSKA - POLAND

APPENDIX TO CERTIFICATE

SMT/CTF-3/0001/3/2018

Supervised Manufacturers' Testing SMT Customer's Testing Facility CTF - Stage 3

List of products

for which the Laboratory of Quality Philips Lighting Poland Sp. z o.o. Pila O/Kętrzyn
is authorized to perform testing
for ITE PREDOM Division as a certification body in the framework
ENEC an CCA agreements and IECEE CB Scheme

CATEGORY	PRODUCTS*)	STANDARDS**)		
		For ENEC and CCA	For IECEE CB Scheme	For national certification
LITE	Fixed general purpose luminaires	EN 60598-1 EN 60598-2-1	IEC 60598-1 IEC 60598-2-1	EN 60598-1 EN 60598-2-1
LITE	Recessed luminaires	EN 60598-1 EN 60598-2-2	IEC 60598-1 IEC 60598-2-2	EN 60598-1 EN 60598-2-2
LITE	Luminaires for road and street lighting	EN 60598-1 EN 60598-2-3	IEC 60598-1 IEC 60598-2-3	EN 60598-1 EN 60598-2-3
LITE	Floodlights	EN 60598-1 EN 60598-2-5	IEC 60598-1 IEC 60598-2-5	EN 60598-1 EN 60598-2-5
LITE	Luminaires for emergency lighting	EN 60598-1 EN 60598-2-22	IEC 60598-1 IEC 60598-2-22	EN 60598-1 EN 60598-2-22
LITE	Luminaires with limited surface temperatures	EN 60598-1 EN 60598-2-24	IEC 60598-1 IEC 60598-2-24	EN 60598-1 EN 60598-2-24
LITE	LED modules for general lighting	EN 62031	IEC 62031	EN 62031
LITE (ENEC+)	LED modules for general lighting	EPRS 001 / IEC 62717	-	-
LITE (ENEC+)	Luminaires	EPRS 002 / IEC 62722-1	-	-
LITE (ENEC+)	LED Luminaires	EPRS 003 / IEC 62722-2-1	-	-
LITE	Lamp and luminaires	-	-	EN 13032-1
LITE	Lamp and luminaires	-	-	EN 13032-2
LITE	Lamp and luminaires	-	-	EN 13032-3
LITE	LED lamps, modules and luminaires	-	-	EN 13032-4
LITE	Solid-State Lighting Products	-	-	LM-79

*) - Name and address of manufacturing place of the products: Philips Lighting Poland Sp. z o.o. Pila, ul. Kossaka 150, O/Kętrzyn
ul. Chrobrego 8, 11-400 Kętrzyn, Poland

**) - newest edition of the standards/documents

Manager of Certification Office
ITE PREDOM Division

Joanna Walczak-Złotkowska

Deputy Director of ITE PREDOM Division

Aleksander Piotrowski

Warsaw, 2018-11-28



Instytut Technologii Elektronowej Oddział PREDOM
Institute of Electron Technology PREDOM Division
ul. Krakowiaków 53, 02-255 WARSZAWA, POLSKA - POLAND

POLSKIE CENTRUM AKREDYTACJI
POLISH CENTRE FOR ACCREDITATION



Sygnatariusz EA MLA
EA MLA Signatory

CERTYFIKAT AKREDYTACJI
LABORATORIUM BADAWCZEGO
ACCREDITATION CERTIFICATE OF TESTING LABORATORY
Nr AB 003

Potwierdza się, że: / This is to confirm that:

INSTYTUT TECHNOLOGII ELEKTRONOWEJ
Al. Lotników 32/46, 02-668 Warszawa
INSTYTUT TECHNOLOGII ELEKTRONOWEJ ODDZIAŁ PREDOM
LABORATORIUM BADAWCZE
ul. Krakowiaków 53, 02-255 Warszawa

spełnia wymagania normy PN-EN ISO/IEC 17025:2005
meets requirements of the PN-EN ISO/IEC 17025:2005 standard

Akredytowana działalność jest określona w Zakresie Akredytacji Nr AB 003
Accredited activity is defined in the Scope of Accreditation No AB 003

Akredytacja pozostaje w mocy pod warunkiem przestrzegania
wymagań jednostki akredytującej określonych w kontrakcie Nr AB 003
This accreditation remains in force provided the Laboratory observes
the requirements of Accreditation Body defined in the Contract No AB 003

Akredytacji udzielono dnia 27.04.1993 r.
Accreditation was granted on 27.04.1993



DYREKTOR
POLSKIEGO CENTRUM AKREDYTACJI


LUCYNA OLBORSKA

Warszawa, 10 grudnia 2018 roku

