

PHILIPS

Lighting



LumiStreet Pro gen2 Micro

BGP391 LED64-4S/740 II DM12 CLO

Introduction

Increasing numbers of municipalities are having to upgrade large-scale conventional street lighting installations with energy efficient LED technology. But they are having to do this with smaller and smaller budgets. That's why the new generation of LumiStreet has been upgraded and designed to provide a solution to this challenge, it is the ideal solution for performing point-to-point replacement of conventional lighting. LumiStreet gen2 achieves this by offering high efficiency, low Total Cost of Ownership, and ease of installation and maintenance. The ease of installation and maintenance is enabled by the Philips Service tag. Moreover, 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.

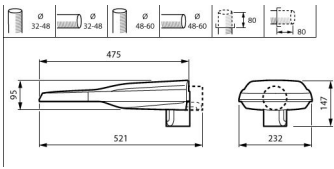
Product Information

Product Family Code	BGP391
Mechanical and Housing	
Housing Material	Aluminum die cast
Optic Material	Polymethyl methacrylate
Optical cover material	Glass
Fixation material	Aluminum
Ingress protection code	-
Mech. impact protection code	-
Corrosion resistance	500 hours Salt Spray Test for standard version, 1.000 hours. Salt Spray Test optional Marine Salt Protection (MSP)
Certification	
CE mark	Yes
ENEC mark	ENEC plus mark
RoHS mark	Yes
WEEE mark	Yes
Protection class IEC	II
Service	
Warranty period	-
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	-
Performance ambient temperature (Tq)	25 °C
Lumen maintenance	1
Lifetime	100000 h
Control gear failure rate at median useful life 100000h	10%
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
2.02	A9+	2.11	A10+	2.46	A13+	1.97	A8+	1.97	A8+

Dimensional drawing(s) - mm



Effective projected area

m²

Light technical Report

Drivers

Description	Xi SR 40W 0.2-1.0A SNEMP 230V C123 sXt
12NC	929002952506
Number of driver(s)	1
Number of luminaire per MCB 16A	30
Inrush current	24.6 A
Inrush time	159.5 μ s
Input Voltage	220V-240V
Input Frequency	50/60 Hz
Start Current	594 mA
End Current	619 mA
System power (minimum)	37 W
System power (maximum)	38.5 W
System power (average)	38 W
Power consumption tolerance	+/-10%
Power Factor (100%)	0.98
Power Factor (50%)	0.95
Connectivity	System Ready
Dimming	Dynadimmer DDF451

Light engine

Light source engine type	LED
Number of LED	20
Initial LED luminaire efficacy (source)	168 lm/W
Initial LED luminaire efficacy (system)	147 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)	6200 lm
Luminous flux tolerance	+/-7%
Initial luminous flux (system)	5456 lm
Photobiological risk	Risk group 0 (exempt) according to EN IEC 62471

Optics

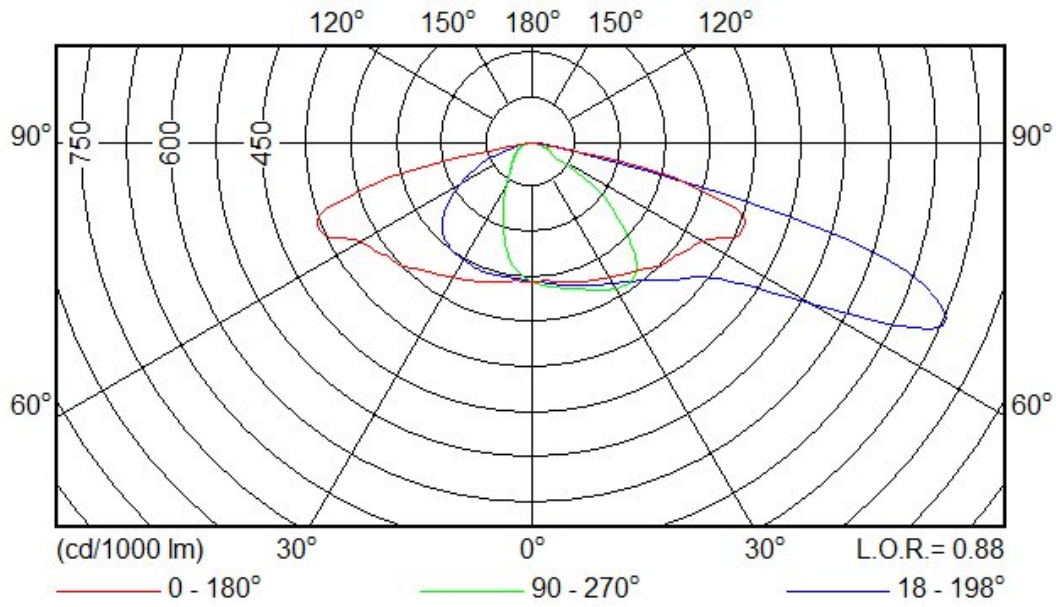
Optical configuration	DM12
LOR	0.88
ULR at tilt=0°	0.00%
G* at tilt=0°	G*3
Imax (at 90° and above)	0 cd/klm
CIE code	39 75 98 100 88

Dimming range

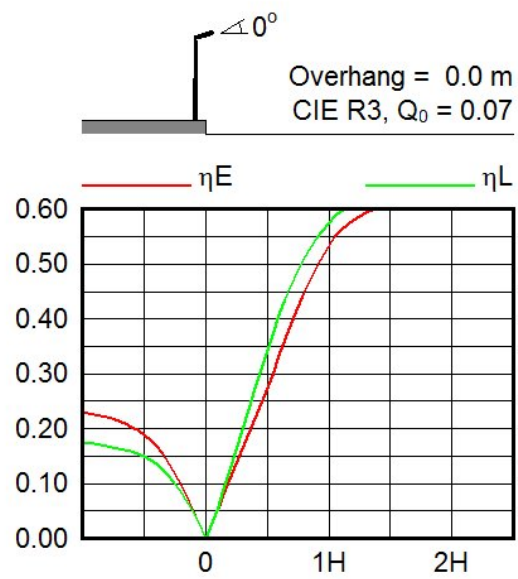
Current percentage	Current (mA)	System power (minimum) (W)	System power (maximum) (W)	System power (average) (W)	Source flux (lm)	System flux (lm)
100	594	37	38.5	38	6200	5456
95	565	35.5	36.5	36	5866	5162
90	535	33.5	34.5	34	5592	4921
85	505	31.5	32.5	32	5315	4677
80	476	30	30.5	30.5	5035	4431
75	446	28	29	28.5	4752	4229
70	416	26.5	27	26.5	4465	3974
65	387	24.5	25	24.5	4175	3716
60	357	22.5	23	23	3881	3454
55	327	21	21.5	21	3583	3189
50	297	19.2	19.6	19.4	3281	2920
45	268	17.4	17.6	17.6	2975	2648
40	238	15.6	15.8	15.8	2664	2398
35	208	13.8	14	13.8	2349	2114
30	179	11.8	12	11.8	2029	1826
25	149	9.8	10	9.9	1704	1534
20	119	7.8	7.9	7.8	1374	1237
15	90	5.8	5.9	5.9	1038	934
10	60	3.9	3.9	3.9	698	628

Photometric Graphs

Polar intensity diagram



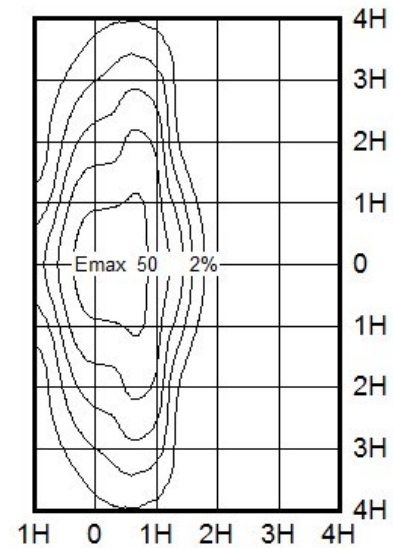
Utilisation factor curve and luminance yield diagram Relative isolux diagram



Horizontal Illuminance $\triangle 0^\circ$

H (m)	E_{max} (lux)
4.0	91
6.0	41
8.0	23

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)	<input type="checkbox"/>
Yokogawa WT3000 power analyzer	<input type="checkbox"/>
Chroma 6415 programmable AC source	<input type="checkbox"/>
Agilent 6675A system DC power supply	<input type="checkbox"/>
Integrating sphere U-101-A	<input type="checkbox"/>
EM TEST NetWave3 AC/DC source	<input type="checkbox"/>
FLUKE Norma 4000 power analyzer	<input type="checkbox"/>
Sonopan L-100 luxmeter	<input type="checkbox"/>
Gigahertz X1-3 hazard lightmeter	<input type="checkbox"/>
Gigahertz XD-45-HB-4 Head	<input type="checkbox"/>
Gigahertz XD-45-HUV-4 head	<input type="checkbox"/>

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

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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.



Łukasiewicz – IMiF Oddział PREDOM
Centrum Badań i Certyfikacji
02-255 Warszawa, ul. Krakowiaków 53



CERTIFICATE OF ACCEPTANCE

Customer's Testing Facility CTF-Stage 3 / E-CTF – Stage 3

Ref. No. 1/CTF/01/23

It is hereby confirmed that the
Laboratory of Quality

Signify Poland Sp. z o.o. O/Kętrzyn
ul. Chrobrego 8, 11-400 Kętrzyn
Poland

is authorized by Łukasiewicz- IMiF PREDOM Division to perform testing
for the certification body Łukasiewicz- IMiF PREDOM Division
in the framework of
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 032

The technical competence of the laboratory
has been checked according to

EN ISO/IEC 17025:2017

*the proof has been given in the assessment carried out by Łukasiewicz- IMiF 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*

This certificate is valid until: **2024-06-26**

Signed by /
Podpisano przez:
Paweł Andrzej
Oziębło
Date / Data:
2023-06-26 09:34

Manager of Certification Office



Warsaw, 2023.06.26

IECEE CTF Program

This Certificate Of Acceptance confirms the participation of the above mentioned laboratory in the CTF program of IECEE and does not authorize the manufacturer to use any certification mark of Łukasiewicz-IMiF Oddział PREDOM or IECEE.



Łukasiewicz – IMiF Oddział PREDOM
Centrum Badań i Certyfikacji
 02-255 Warszawa, ul. Krakowiaków 53



APPENDIX TO CERTIFICATE

Ref. No. 1/CTF/01/23

Customer's Testing Facility CTF-Stage 3 / E-CTF – Stage 3

List of products and standards

For which the Laboratory of Quality Signify Poland Sp. z o.o. O/Kętrzyn is authorized to perform testing for the certification body Łukasiewicz – IMiF PREDOM Division in the framework of ENEC, ENEC+, CCA agreements, IECIEE CB Scheme and national certification

CATEGORY	PRODUCTS*)	STANDARDS**)		
		For ENEC and CCA	For IECIEE 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
HOR	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	IEC 62262	EN 62262

*) – Name and address of manufacturing place of the products: Signify Poland Sp. z o.o. O/Kętrzyn ul. Chrobrego 8, 11-400 Kętrzyn., Poland
 **) – newest edition of the standards/documents

Signed by /
 Podpisano przez:

 Paweł Andrzej
 Oziębło
 Date / Data:
 2023-06-26 09:34
 Manager of Certification Office



Warsaw, 2023.06.26



Testing Facilities CTF STAGE 3

E02/000009

AENOR recognizes that the testing facilities of the organization

SIGNIFY B.V.

registered office I.B.R.S./C.C.R.I. Nº 10461
5600 VB EINDHOVEN (The Netherlands)

have been accepted for the **Application of procedure CUSTOMER'S TESTING FACILITIES (CTF) - STAGE 3**

in conformity with international documents IECCE OD-2048 / ETICS OD-ECS 032

Name of testing facility Signify Manufacturing Spain
Address of testing facility Crta. de las Arcas Reales, s/n
47008 Valladolid - Spain

See annex for more information.

Certification scheme This recognition has been issued pursuant to international documents IECCE OD-2048 / ETICS OD-ECS 032 for performing the testing in accordance with standard(s) as detailed in annex.

This certificate is valid unless it is cancelled or withdrawn upon AENOR's written notification and for the particular conditions laid down in the agreement signed by both parties.

This certificate supersedes E02/000009, dated 2023-03-28

First issued on 2018-10-23
Modified on 2023-05-19
Validity 2024-10-23



Rafael GARCÍA MEIRO
CEO

AENOR INTERNACIONAL S.A.U.
Génova, 6. 28004 Madrid. España
Tel. +34 91 432 60 00 - www.aenor.com



Testing Facilities CTF STAGE 3

E02/000009

Annex to Certificate

Name of testing facility Signify Manufacturing Spain
 Address of testing facility Crta. de las Arcas Reales, s/n
 47008 Valladolid - Spain

Category	Standards	Clauses
LITE	IEC 60598-1:2014 + AMD1:2017	All clauses
LITE	IEC 62471:2006, IEC TR 62778:2014	All clauses
LITE	EN 60598-1:2015 + A1:2018	All clauses
LITE	EN 60598-2-1:1989	All clauses
LITE	EN 60598-2-2:2012	All clauses
LITE	EN 60598-2-3:2003 + A1:2011	All clauses
LITE	EN 60598-2-5:2015	All clauses
LITE	EN 60598-2-24:2013	All clauses
LITE	EN 62031:2008 + A1:2013 + A2:2015	All clauses
LITE	EN 62471:2008	All clauses
LITE	IEC 60598-2-1:1979 + AMD1:1987	All clauses
LITE	IEC 62031:2018	All clauses
LITE	IEC 62717:2014 + AMD1:2015 + AMD2:2019	All clauses
LITE	IEC 60598-2-2:2011	All clauses
LITE	IEC 62722-2-1:2014	All clauses
LITE	PD EPRS 001:2014-12	All clauses
LITE	PD EPRS 003:2014-12	All clauses
LITE	PD EPRS 001:2018-05	All clauses
LITE	PD EPRS 003:2018-05	All clauses
-	EN 62262:2002 + A1:2021	All clauses
LITE	IEC 60598-1:2020	All clauses except 9.2.10 and 9.2.11
LITE	IEC 60598-2-1:2020	All clauses
LITE	EN IEC 60598-1:2021 + A11:2022	All clauses except 9.2.10 and 9.2.11
LITE	EN IEC 60598-2-1:2021	All clauses
LITE	IEC 60598-2-3:2002 + AMD1:2011	All clauses
LITE	EN IEC 62031:2020 + A11:2021	All clauses
LITE	IEC 60598-2-5:2015	All clauses
LITE	IEC 60598-2-24:2013	All clauses
-	IEC 62262:2002 + AMD1:2021	All clauses
LITE	IEC 60529:2013	All clauses
LITE	IEC 62031:2008 + AMD1:2012 + AMD2:2014	All clauses

First issued on 2018-10-23
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 Validity 2024-10-23

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