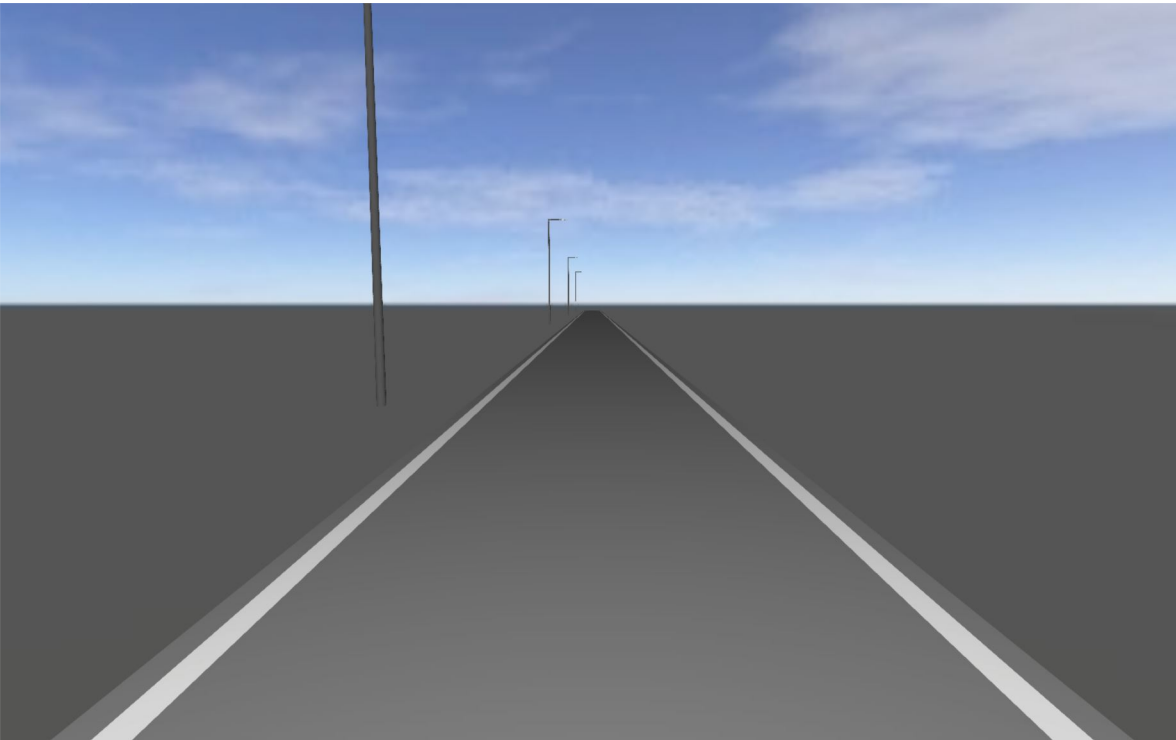


Date

2024-05-16



Voru

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Contacts



Atstovas

Gintaras Alionis

Signify International B.V. Latviar
J. Balčikonio g. 9, (Technopolis,
Delta biurai)
LT-08247, Vilnius, Lietuva

T +37069958988
gintaras.alionis@signify.com

Luminaire list

 Φ_{total}

8952 lm

 P_{total}

63.2 W

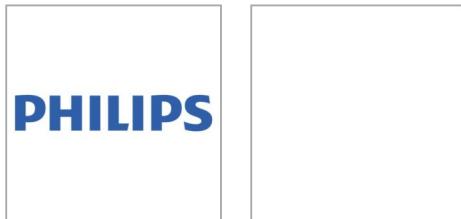
Luminous efficacy

141.6 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	Philips	BGP281I- 2402a326- 601c- 4191- 9aeb- f9dbdda71	BGP281 T25 LED25-4S/740 PSDD DN11 FG	15.8 W	2238 lm	141.7 lm/W

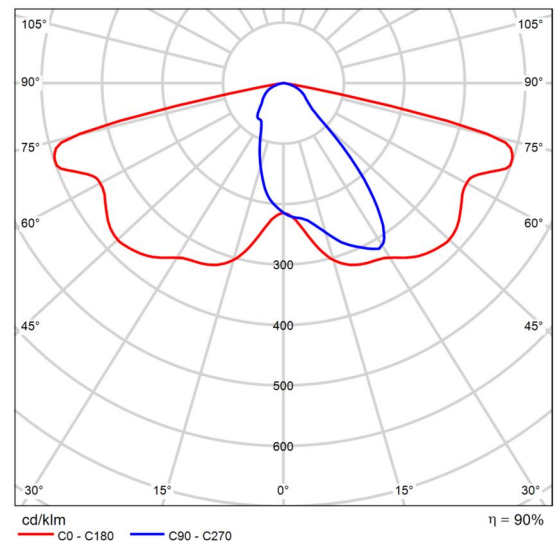
Product data sheet

Philips - BGP281 T25 LED25-4S/740 PSDD DN11 FG

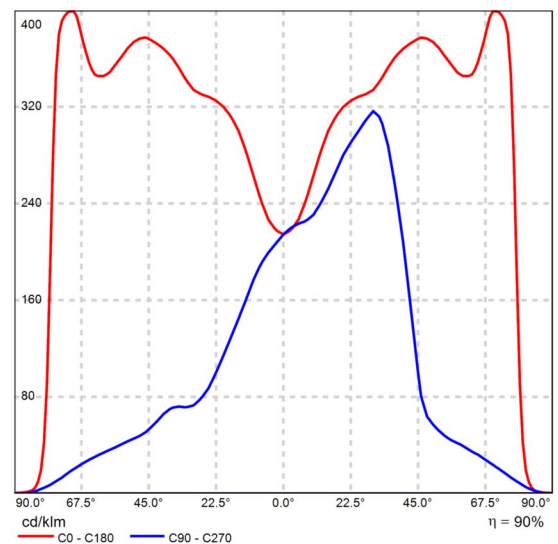


Article No.	BGP281I-2402a326-601c-4191-9aeb-f9dbdda71e5d
P	15.8 W
Φ_{Lamp}	2500 lm
$\Phi_{\text{Luminaire}}$	2238 lm
η	89.52 %
Luminous efficacy	141.7 lm/W
CCT	4000 K
CRI	70

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.



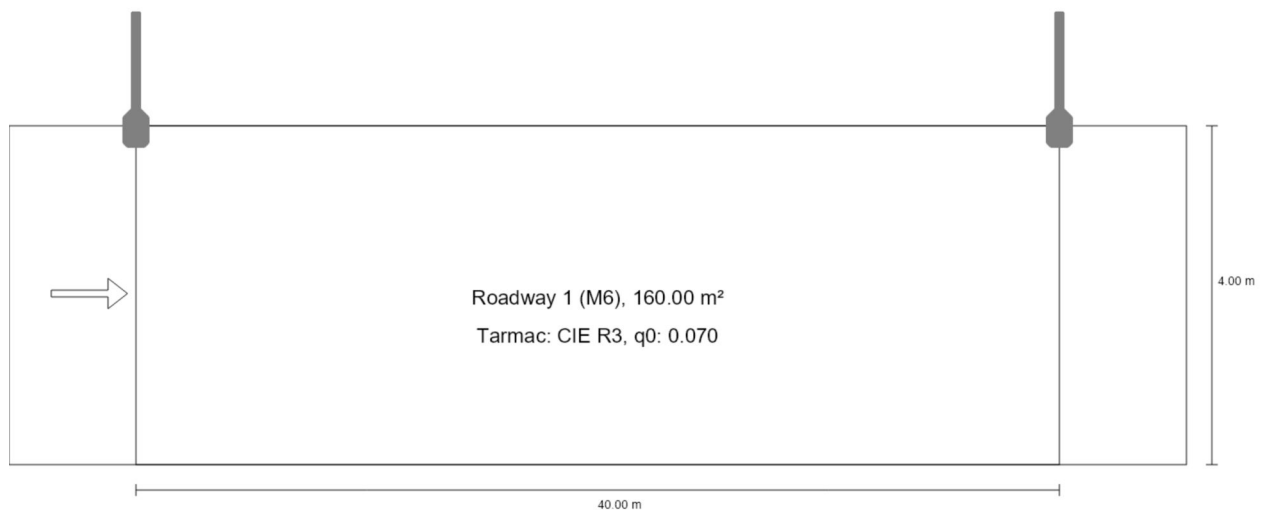
Polar LDC



Linear LDC

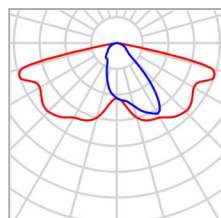
Street 1

Summary (according to EN 13201:2015)



Street 1

Summary (according to EN 13201:2015)



Manufacturer	Philips	P	15.8 W
Article No.	BGP281I-2402a326-601c-4191-9aeb-f9dbdda71e5d	Φ_{Lamp}	2500 lm
Article name	BGP281 T25 LED25-4S/740 PSDD DN11 FG	$\Phi_{\text{Luminaire}}$	2238 lm
Fitting	1x LED25-4S/740	η	89.52 %

Street 1

Summary (according to EN 13201:2015)

BGP281 T25 LED25-4S/740 PSDD DN11 FG (single side top)

Pole distance	40.000 m
(1) Light spot height	8.000 m
(2) Light point overhang	0.000 m
(3) Boom inclination	0.0°
(4) Boom length	1.000 m
Annual operating hours	4000 h: 100.0 %, 15.8 W
Wattage / route	394.9 W/km
ULR / ULOR	0.00 / 0.00
Max. luminous intensities	≥ 70°: 721 cd/klm
Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 80°: 81.1 cd/klm ≥ 90°: 0.00 cd/klm
Luminous intensity class	G*3
The luminous intensity values in [cd/klm] for calculation of the luminous intensity class refer to the luminaire luminous flux according to EN 13201:2015.	
Glare index class	D.6
MF	0.80



Street 1

Summary (according to EN 13201:2015)

Results for valuation fields

A maintenance factor of 0.80 was used for calculating for the installation.

	Symbol	Calculated	Target	Check
Roadway 1 (M6)	L_{av}	0.31 cd/m ²	≥ 0.30 cd/m ²	✓
	U_o	0.67	≥ 0.35	✓
	U_l	0.72	≥ 0.40	✓
	TI	9 %	≤ 20 %	✓
	R_{EI}	0.61	≥ 0.30	✓

Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
Street 1	D_p	0.024 W/lx*m ²	–
BGP281 T25 LED25-4S/740 PSDD DN11 FG (single side top)	D_e	0.4 kWh/m ² yr	63.2 kWh/yr

Street 1

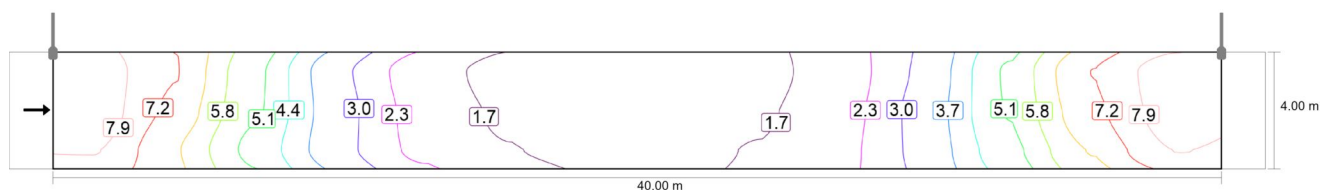
Roadway 1 (M6)

Results for valuation field

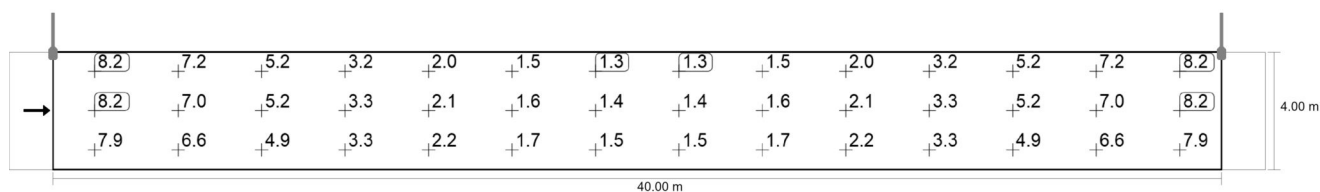
	Symbol	Calculated	Target	Check
Roadway 1 (M6)	L_{av}	0.31 cd/m ²	≥ 0.30 cd/m ²	✓
	U_o	0.67	≥ 0.35	✓
	U_l	0.72	≥ 0.40	✓
	TI	9 %	≤ 20 %	✓
	R_{El}	0.61	≥ 0.30	✓

Results for observer

	Symbol	Calculated	Target	Check
Observer 1 Position: -60.000 m, 2.000 m, 1.500 m	L_{av}	0.31 cd/m ²	≥ 0.30 cd/m ²	✓
	U_o	0.67	≥ 0.35	✓
	U_l	0.72	≥ 0.40	✓
	TI	9 %	≤ 20 %	✓



Maintenance value, horizontal illuminance [lx] (Iso-illuminance curves)



Maintenance value, horizontal illuminance [lx] (Value grid)

m	1.429	4.286	7.143	10.000	12.857	15.714	18.571	21.429	24.286	27.143	30.000	32.857	35.714	38.571
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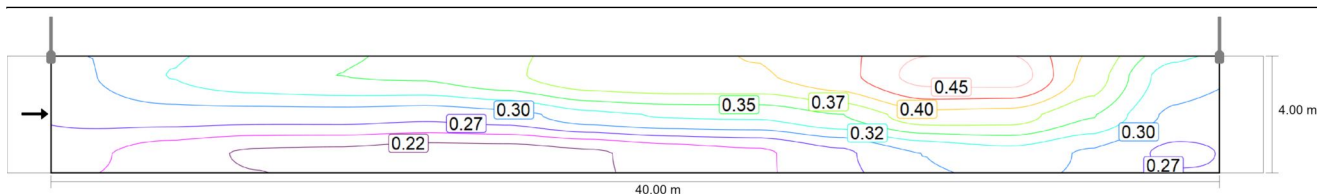
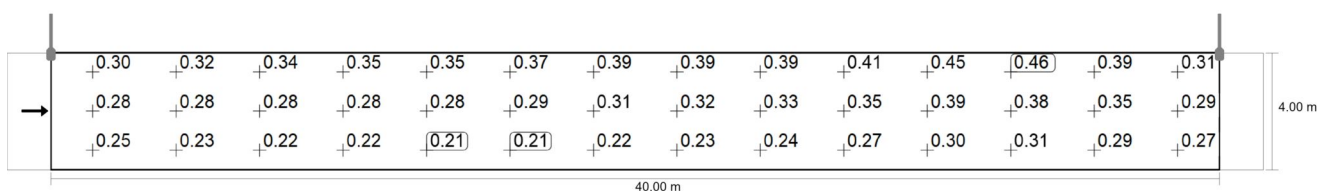
Street 1

Roadway 1 (M6)

m	1.429	4.286	7.143	10.000	12.857	15.714	18.571	21.429	24.286	27.143	30.000	32.857	35.714	38.571
3.333	8.24	7.22	5.22	3.18	1.97	1.46	1.31	1.31	1.46	1.97	3.18	5.22	7.22	8.24
2.000	8.23	7.00	5.16	3.30	2.08	1.57	1.41	1.41	1.57	2.08	3.30	5.16	7.00	8.23
0.667	7.92	6.56	4.88	3.25	2.17	1.69	1.53	1.53	1.69	2.17	3.25	4.88	6.56	7.92

Maintenance value, horizontal illuminance [lx] (Value chart)

	E_{av}	E_{min}	E_{max}	$U_o (g_1)$	g_2
Maintenance value, horizontal illuminance	4.06 lx	1.31 lx	8.24 lx	0.32	0.16

Observer 1: Maintenance value, luminance with dry roadway [cd/m^2] (Iso-illuminance curves)Observer 1: Maintenance value, luminance with dry roadway [cd/m^2] (Value grid)

m	1.429	4.286	7.143	10.000	12.857	15.714	18.571	21.429	24.286	27.143	30.000	32.857	35.714	38.571
3.333	0.30	0.32	0.34	0.35	0.35	0.37	0.39	0.39	0.39	0.41	0.45	0.46	0.39	0.31
2.000	0.28	0.28	0.28	0.28	0.28	0.29	0.31	0.32	0.33	0.35	0.39	0.38	0.35	0.29
0.667	0.25	0.23	0.22	0.22	0.21	0.21	0.22	0.23	0.24	0.27	0.30	0.31	0.29	0.27

Observer 1: Maintenance value, luminance with dry roadway [cd/m^2] (Value chart)

	L_{av}	L_{min}	L_{max}	$U_o (g_1)$	g_2
Observer 1: Maintenance value, luminance with dry roadway	0.31 cd/m^2	0.21 cd/m^2	0.46 cd/m^2	0.67	0.46