

Ozolnieki

Partner for Contact:
Order No.:
Company:
Customer No.:

Date: 12.05.2019
Operator: Igor Ptashits

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Ozolnieki

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Ozolnieki

Project1

Spectrum A/S

Balvu street 5, Riga LV-1003 Latvia



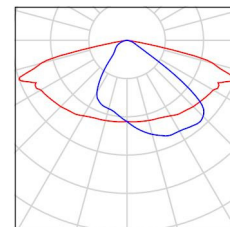
12.05.2019

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Ozolnieki / Luminaire parts list

4 Pieces PHILIPS BGP203 T25 1 xLED40-4S/740 DM10
Article No.:
Luminous flux (Luminaire): 3480 lm
Luminous flux (Lamps): 4000 lm
Luminaire Wattage: 24.0 W
Luminaire classification according to CIE: 100
CIE flux code: 39 74 97 100 87
Fitting: 1 x LED40-4S/740 (Correction Factor 1.000).

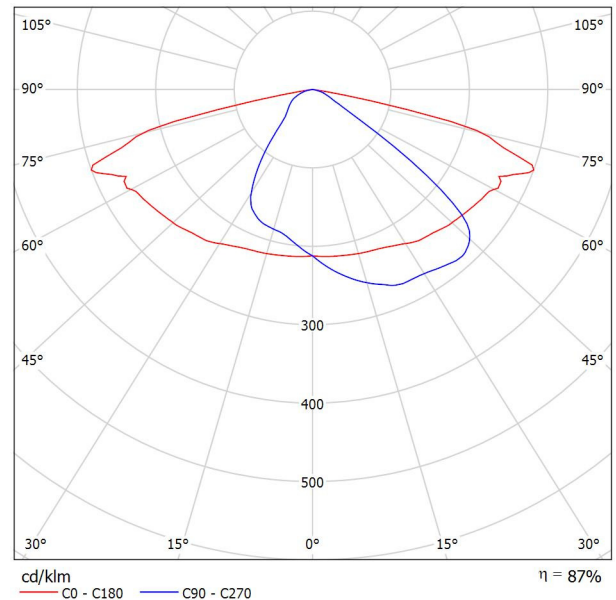
See our luminaire
catalog for an image of
the luminaire.



PHILIPS BGP203 T25 1 xLED40-4S/740 DM10 / Luminaire Data Sheet

Luminous emittance 1:

See our luminaire catalog for an image of the luminaire.



Luminaire classification according to CIE: 100
 CIE flux code: 39 74 97 100 87

UniStreet – simple, cost-effective road-lighting range. At relatively low initial cost, the highly efficient LED-based UniStreet luminaire offers significant cost savings compared with conventional street lighting, ensuring full payback within a short period of time. Available in a choice of lumen packages, UniStreet allows point-to-point replacement of outdated conventional light sources and luminaires. The compact, slim luminaire is made of quality recyclable materials. And being a LED solution, it requires little maintenance.

Core version design for high-volume projects at relatively low initial budget. Offer limited range of optics.
 Performer version design for customers who are preparing big renovation projects, TCO oriented

Due to missing symmetry properties, no UGR table can be displayed for this luminaire.

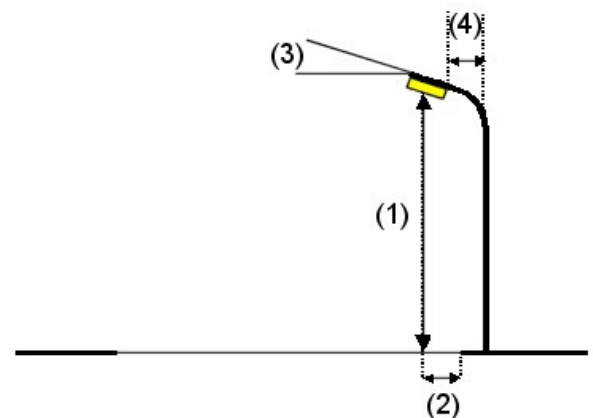
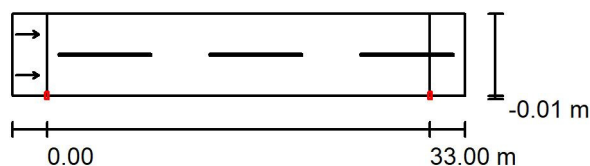
Street 1 / Planning data

Street Profile

Roadway 1 (Width: 7.000 m, Number of lanes: 2, tarmac: R3, q0: 0.070)

Maintenance factor: 0.80

Luminaire Arrangements



| | |
|----------------------------|---|
| Luminaire: | PHILIPS BGP203 T25 1 xLED40-4S/740 DM10 |
| Luminous flux (Luminaire): | 3480 lm |
| Luminous flux (Lamps): | 4000 lm |
| Luminaire Wattage: | 24.0 W |
| Arrangement: | Single row, bottom |
| Pole Distance: | 33.000 m |
| Mounting Height (1): | 6.100 m |
| Height: | 6.000 m |
| Overhang (2): | 0.000 m |
| Boom Angle (3): | 5.0 ° |
| Boom Length (4): | 0.641 m |

Maximum luminous intensities

| | |
|---------|-------------|
| at 70°: | 501 cd/klm |
| at 80°: | 133 cd/klm |
| at 90°: | 0.15 cd/klm |

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.

No luminous intensities above 95°.

Arrangement complies with luminous intensity class G2.

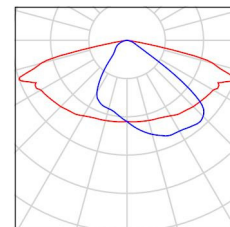
Arrangement complies with glare index class D.6.

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Street 1 / Luminaire parts list

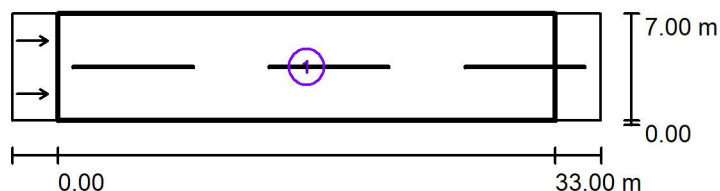
PHILIPS BGP203 T25 1 xLED40-4S/740 DM10
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Fitting: 1 x LED40-4S/740 (Correction Factor
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See our luminaire
catalog for an image of
the luminaire.



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Street 1 / Photometric Results



Maintenance factor: 0.80

Scale 1:500

Calculation Field List

- 1 Valuation Field Roadway 1
 Length: 33.000 m, Width: 7.000 m
 Grid: 11 x 6 Points
 Accompanying Street Elements: Roadway 1.
 tarmac: R3, q0: 0.070
 Selected Lighting Class: ME6

(All lighting performance requirements are met.)

| | L_{av} [cd/m ²] | U0 | UI | TI [%] | SR |
|-------------------------------------|-------------------------------|--------|--------|--------|------|
| Calculated values: | 0.41 | 0.47 | 0.55 | 15 | 0.63 |
| Required values according to class: | ≥ 0.30 | ≥ 0.35 | ≥ 0.40 | ≤ 15 | / |
| Fulfilled/Not fulfilled: | ✓ | ✓ | ✓ | ✓ | ✓ |

Ozolnieki

Project1

Spectrum A/S

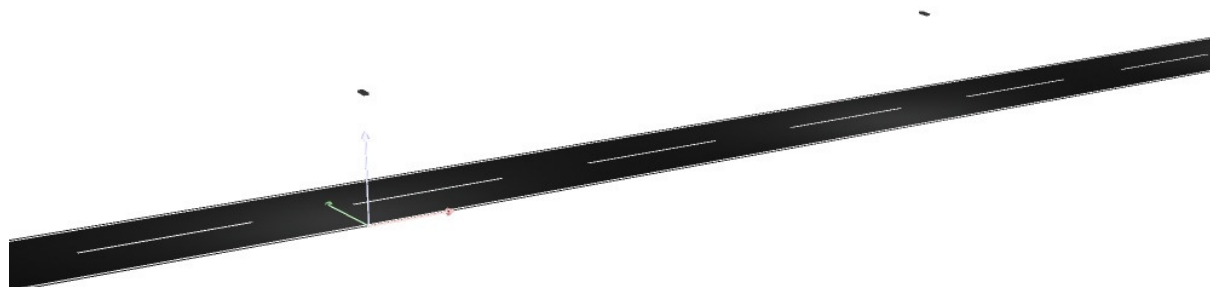
Balvu street 5, Riga LV-1003 Latvia



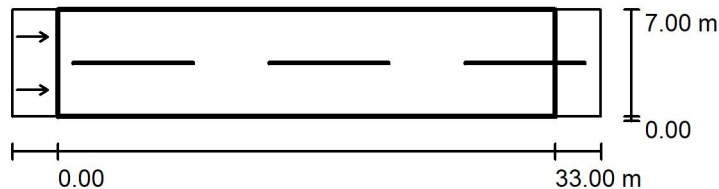
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Street 1 / 3D Rendering



Street 1 / Valuation Field Roadway 1 / Results overview



Maintenance factor: 0.80

Scale 1:500

Grid: 11 x 6 Points

Accompanying Street Elements: Roadway 1.

tarmac: R3, q0: 0.070

Selected Lighting Class: ME6

(All lighting performance requirements are met.)

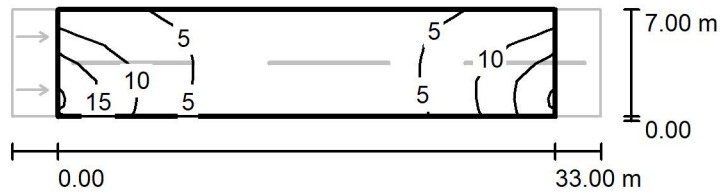
| | L_{av} [cd/m ²] | U0 | UI | TI [%] | SR |
|-------------------------------------|-------------------------------|-------------|-------------|-----------|------|
| Calculated values: | 0.41 | 0.47 | 0.55 | 15 | 0.63 |
| Required values according to class: | ≥ 0.30 | ≥ 0.35 | ≥ 0.40 | ≤ 15 | / |
| Fulfilled/Not fulfilled: | ✓ | ✓ | ✓ | ✓ | ✓ |

Assigned Observer (2 Pieces):

| No. | Observer | Position [m] | L_{av} [cd/m ²] | U0 | UI | TI [%] |
|-----|------------|-------------------------|-------------------------------|------|------|--------|
| 1 | Observer 1 | (-60.000, 1.750, 1.500) | 0.41 | 0.48 | 0.55 | 15 |
| 2 | Observer 2 | (-60.000, 5.250, 1.500) | 0.44 | 0.47 | 0.72 | 10 |

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Street 1 / Valuation Field Roadway 1 / Isolines (E)



Values in Lux, Scale 1 : 500

Grid: 11 x 6 Points

E_{av} [lx]
6.61

E_{min} [lx]
2.14

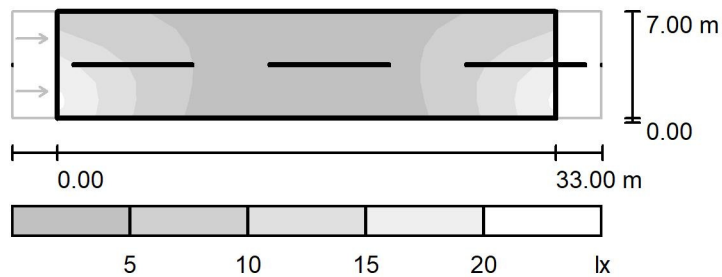
E_{max} [lx]
18

u_0
0.323

E_{min} / E_{max}
0.119

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Street 1 / Valuation Field Roadway 1 / Greyscale (E)



Scale 1 : 500

Grid: 11 x 6 Points

E_{av} [lx]
6.61

E_{min} [lx]
2.14

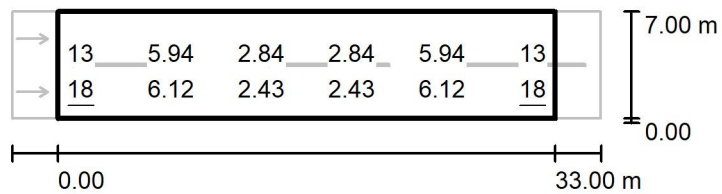
E_{max} [lx]
18

u_0
0.323

E_{min} / E_{max}
0.119

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Street 1 / Valuation Field Roadway 1 / Value Chart (E)



Values in Lux, Scale 1 : 500

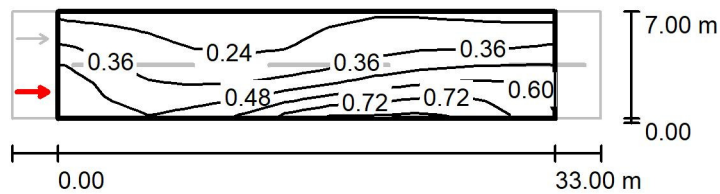
Not all calculated values could be displayed.

Grid: 11 x 6 Points

| E_{av} [lx] | E_{min} [lx] | E_{max} [lx] | $u0$ | E_{min} / E_{max} |
|---------------|----------------|----------------|-------|---------------------|
| 6.61 | 2.14 | 18 | 0.323 | 0.119 |

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Street 1 / Valuation Field Roadway 1 / Observer 1 / Isolines (L)



Values in Candela/m², Scale 1 : 500

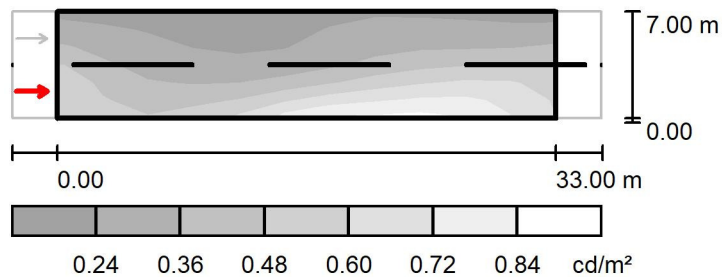
Grid: 11 x 6 Points

Observer Position: (-60.000 m, 1.750 m, 1.500 m)

tarmac: R3, q0: 0.070

| | L_{av} [cd/m ²] | U0 | UI | TI [%] |
|---|-------------------------------|--------|--------|--------|
| Calculated values: | 0.41 | 0.48 | 0.55 | 15 |
| Required values according to class ME6: | ≥ 0.30 | ≥ 0.35 | ≥ 0.40 | ≤ 15 |
| Fulfilled/Not fulfilled: | ✓ | ✓ | ✓ | ✓ |

Street 1 / Valuation Field Roadway 1 / Observer 1 / Greyscale (L)



Scale 1 : 500

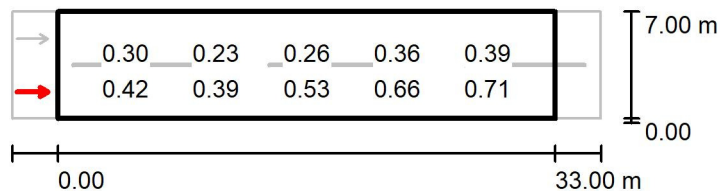
Grid: 11 x 6 Points

Observer Position: (-60.000 m, 1.750 m, 1.500 m)

tarmac: R3, q0: 0.070

| | L_{av} [cd/m ²] | U0 | UI | TI [%] |
|---|-------------------------------|-------------|-------------|-----------|
| Calculated values: | 0.41 | 0.48 | 0.55 | 15 |
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| Fulfilled/Not fulfilled: | ✓ | ✓ | ✓ | ✓ |

Street 1 / Valuation Field Roadway 1 / Observer 1 / Value Chart (L)



Values in Candela/m², Scale 1 : 500

Not all calculated values could be displayed.

Grid: 11 x 6 Points

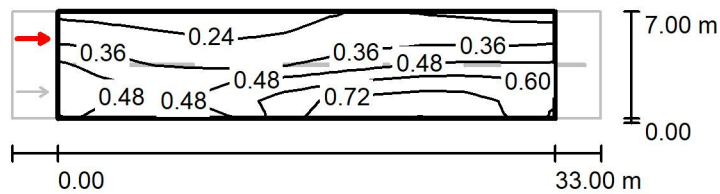
Observer Position: (-60.000 m, 1.750 m, 1.500 m)

tarmac: R3, q0: 0.070

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Street 1 / Valuation Field Roadway 1 / Observer 2 / Isolines (L)



Values in Candela/m², Scale 1 : 500

Grid: 11 x 6 Points

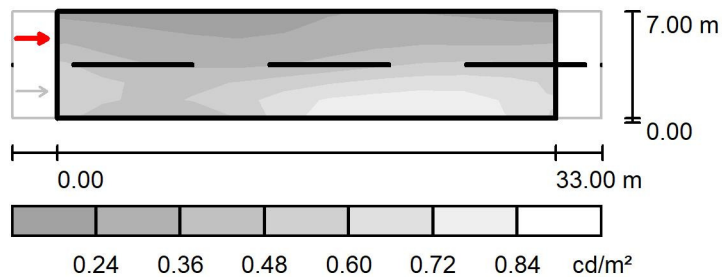
Observer Position: (-60.000 m, 5.250 m, 1.500 m)

tarmac: R3, q0: 0.070

| | L_{av} [cd/m ²] | U0 | UI | TI [%] |
|---|-------------------------------|--------|--------|--------|
| Calculated values: | 0.44 | 0.47 | 0.72 | 10 |
| Required values according to class ME6: | ≥ 0.30 | ≥ 0.35 | ≥ 0.40 | ≤ 15 |
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Street 1 / Valuation Field Roadway 1 / Observer 2 / Greyscale (L)



Scale 1 : 500

Grid: 11 x 6 Points

Observer Position: (-60.000 m, 5.250 m, 1.500 m)

tarmac: R3, q0: 0.070

| | L_{av} [cd/m ²] | U0 | UI | TI [%] |
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Street 1 / Valuation Field Roadway 1 / Observer 2 / Value Chart (L)



Values in Candela/m², Scale 1 : 500

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Grid: 11 x 6 Points

Observer Position: (-60.000 m, 5.250 m, 1.500 m)

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