

Vias Arteriais - Avenida Leopoldino de Oliveira

Luminária: 90W
Altura: 7 m
Distância entre Postes: 27 m
Via: 8 m
Canteiro Central: 3 m
Calçada: 2,5 m
Braço: 4 m

Rua/Av.: Av. Leopoldino de Oliveira
Classificação de Via/Lux: V1 / 30 lx
Classificação de Calçada/Lux: P2 / 10 lx

Date: 09.04.2015
Operator:

Operator
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Fax
e-Mail

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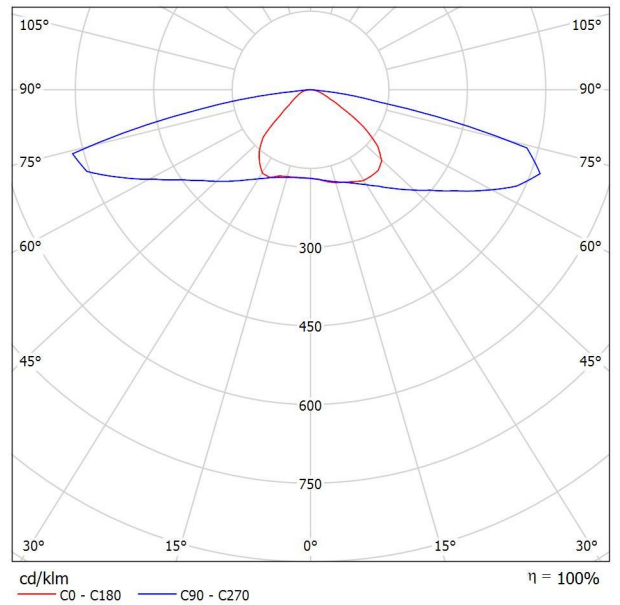
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Luminária 90W / Luminaire Data Sheet

See our luminaire catalog for an image of the luminaire.

Luminous emittance 1:



Luminaire classification according to CIE: 100
 CIE flux code: 31 65 93 100 100

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

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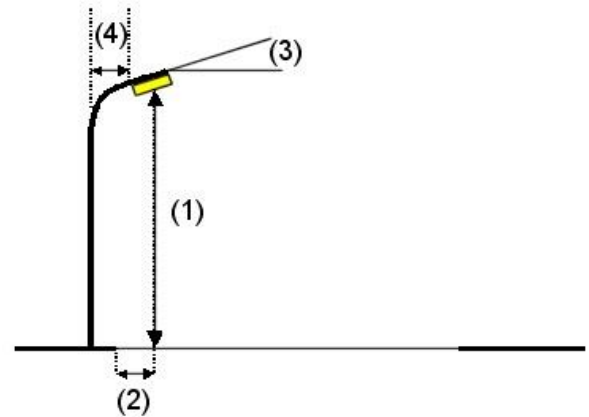
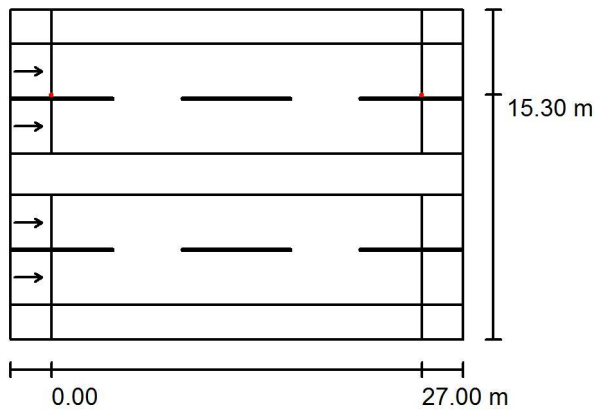
Projeto Luminotécnico / Planning data

Street Profile

Calçada	(Width: 2.500 m)
Via	(Width: 8.000 m, Number of lanes: 2, tarmac: R3, q0: 0.070)
Canteiro Central	(Width: 3.000 m, Height: 0.000 m)
Via	(Width: 8.000 m, Number of lanes: 2, tarmac: R3, q0: 0.070)
Calçada	(Width: 2.500 m)

Maintenance factor: 1.00

Luminaire Arrangements



Luminaire:	Luminária 90W
Luminous flux (Luminaire):	8387 lm
Luminous flux (Lamps):	8387 lm
Luminaire Wattage:	97.2 W
Arrangement:	Single row, top
Pole Distance:	27.000 m
Mounting Height (1):	7.000 m
Height:	6.900 m
Overhang (2):	3.700 m
Boom Angle (3):	0.0 °
Boom Length (4):	4.000 m

Maximum luminous intensities	
at 70°:	571 cd/klm
at 80°:	738 cd/klm
at 90°:	34 cd/klm

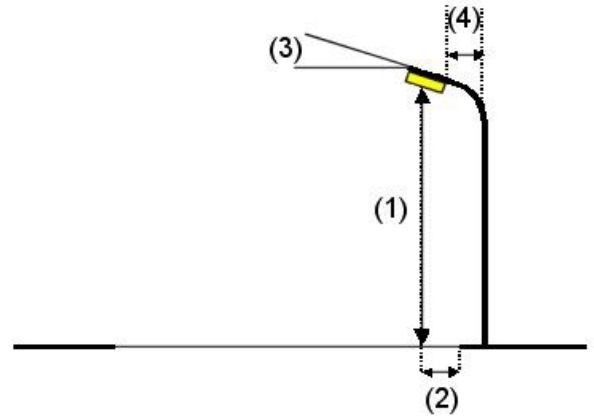
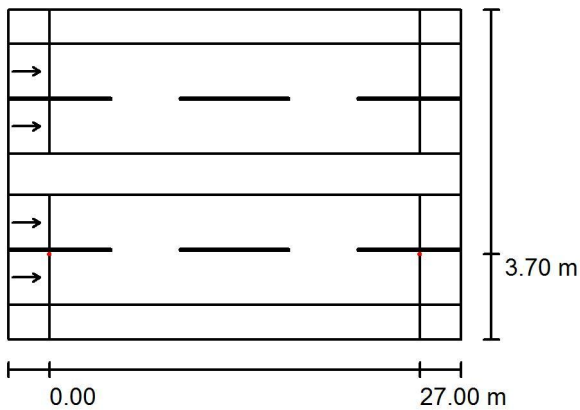
Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.

Arrangement complies with glare index class D.3.

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Projeto Luminotécnico / Planning data

Luminaire Arrangements



Luminaire:	Luminária 90W
Luminous flux (Luminaire):	8387 lm
Luminous flux (Lamps):	8387 lm
Luminaire Wattage:	97.2 W
Arrangement:	Single row, bottom
Pole Distance:	27.000 m
Mounting Height (1):	7.000 m
Height:	6.900 m
Overhang (2):	3.700 m
Boom Angle (3):	0.0 °
Boom Length (4):	4.000 m

Maximum luminous intensities

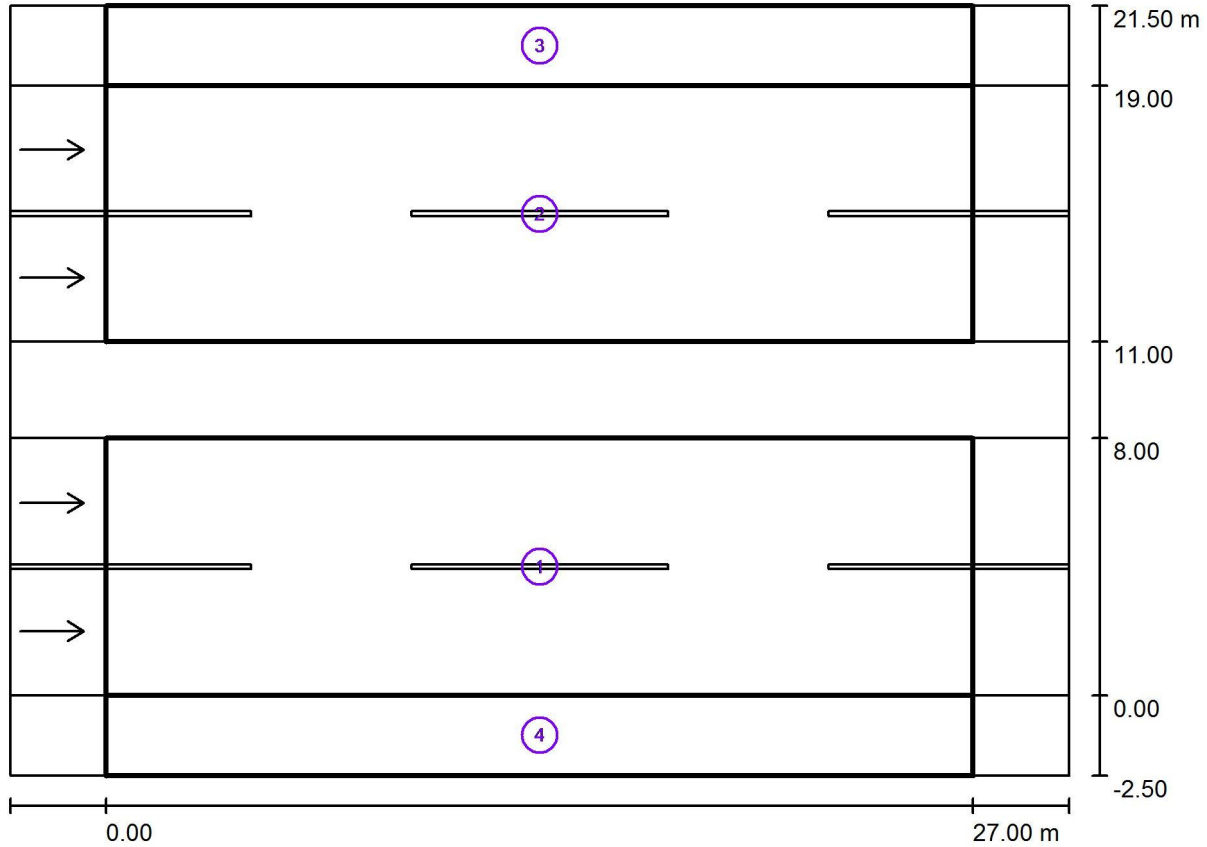
at 70°:	571 cd/klm
at 80°:	738 cd/klm
at 90°:	34 cd/klm

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

Arrangement complies with glare index class D.3.

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Projeto Luminotécnico / Photometric Results



Maintenance factor: 1.00

Scale 1:236

Calculation Field List

- 1 Via
Length: 27.000 m, Width: 8.000 m
Grid: 10 x 6 Points
Accompanying Street Elements: Via.
tarmac: R3, q0: 0.070
Selected Lighting Class: ME4a

(Not all lighting performance requirements are met.)

	L_{av} [cd/m ²]	U0	UI	TI [%]	SR
Calculated values:	2.09	0.42	0.88	10	0.74
Required values according to class:	≥ 2.00	≥ 0.40	≥ 0.70	≤ 10	≥ 0.50
Fulfilled/Not fulfilled:	✓	✓	✓	✓	✓

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Projeto Luminotécnico / Photometric Results

Calculation Field List

2 Via
Length: 27.000 m, Width: 8.000 m
Grid: 10 x 6 Points
Accompanying Street Elements: Via.
tarmac: R3, q0: 0.070
Selected Lighting Class: ME4a

(Not all lighting performance requirements are met.)

	L_{av} [cd/m ²]	U0	UI	TI [%]	SR
Calculated values:	2.07	0.42	0.89	10	0.74
Required values according to class:	≥ 2.00	≥ 0.40	≥ 0.70	≤ 10	≥ 0.50
Fulfilled/Not fulfilled:	✓	✓	✓	✓	✓

3 Calçada
Length: 27.000 m, Width: 2.500 m
Grid: 10 x 3 Points
Accompanying Street Elements: Calçada.
Selected Lighting Class: CE5

(All lighting performance requirements are met.)

	E_{av} [lx]	U0
Calculated values:	10.57	0.48
Required values according to class:	≥ 5.00	≥ 0.20
Fulfilled/Not fulfilled:	✓	✓

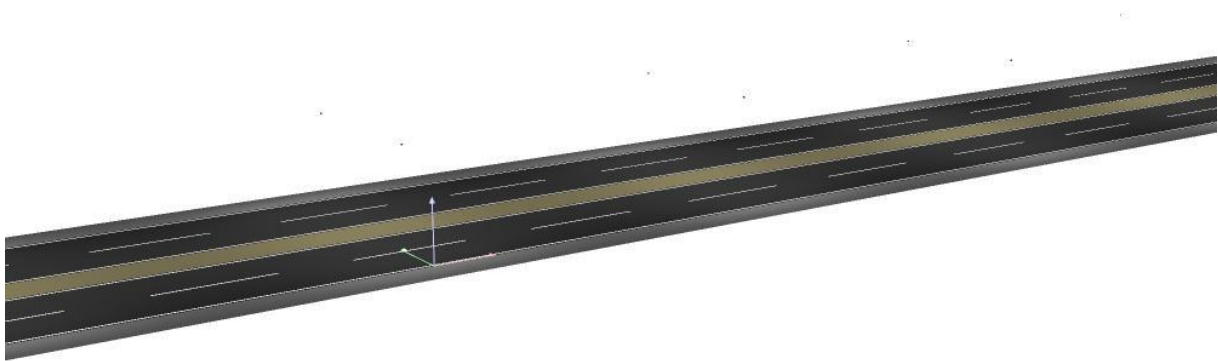
4 Calçada
Length: 27.000 m, Width: 2.500 m
Grid: 10 x 3 Points
Accompanying Street Elements: Calçada.
Selected Lighting Class: CE5

(All lighting performance requirements are met.)

	E_{av} [lx]	U0
Calculated values:	10.57	0.48
Required values according to class:	≥ 5.00	≥ 0.20
Fulfilled/Not fulfilled:	✓	✓

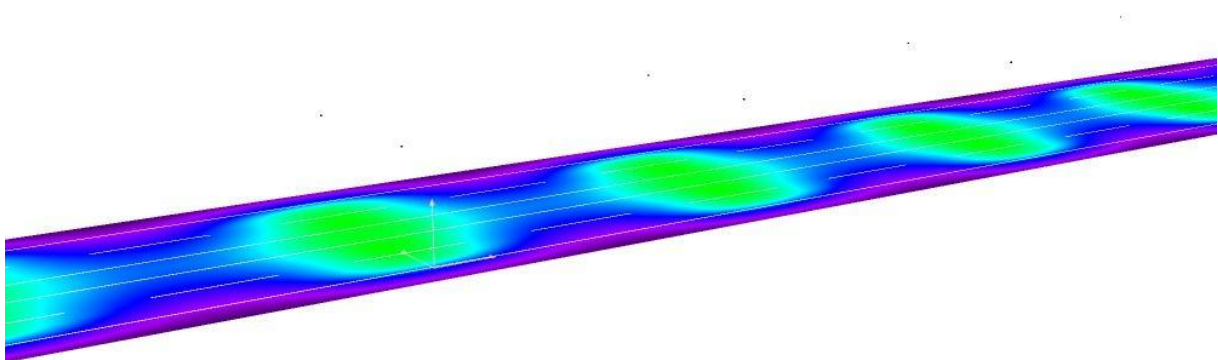
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Projeto Luminotécnico / 3D Rendering



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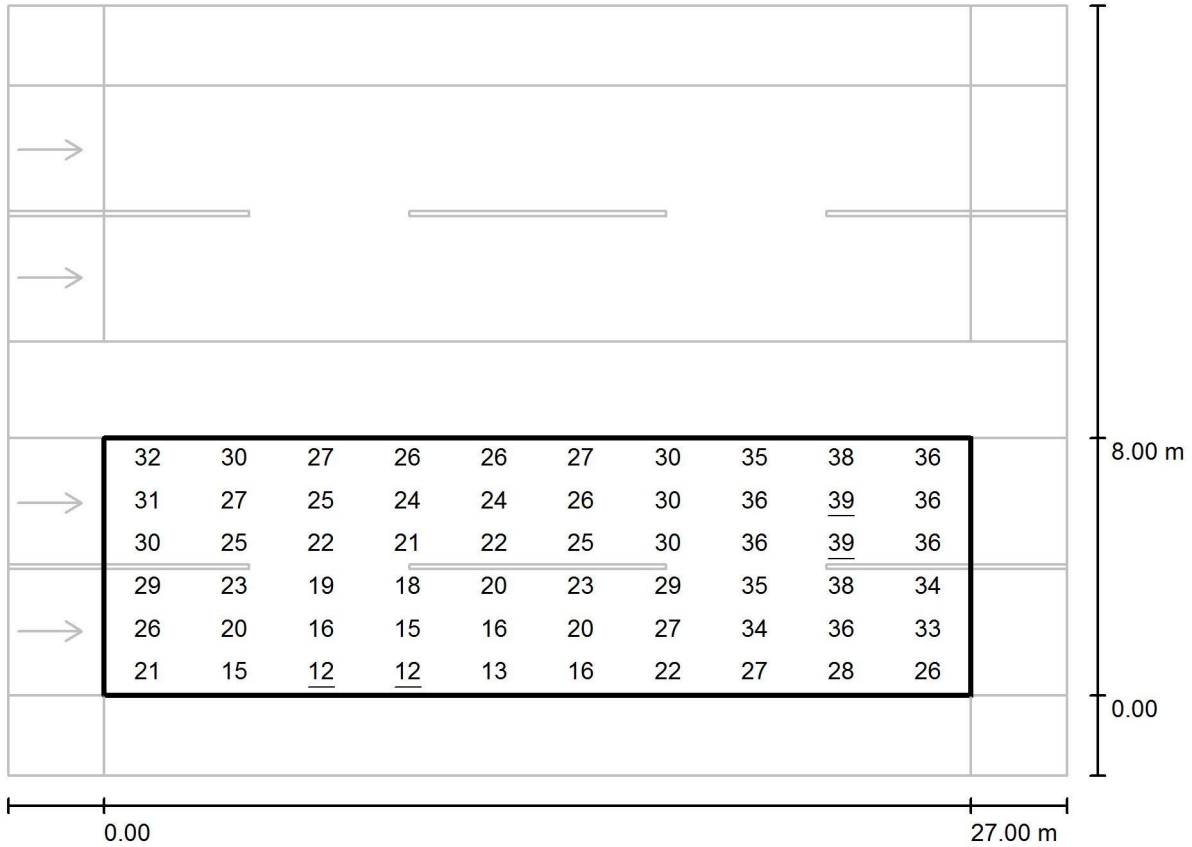
Projeto Luminotécnico / False Colour Rendering



0 10 20 30 40 50 60 70 80 lx

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Projeto Luminotécnico / Via / Value Chart (E)



Values in Lux, Scale 1 : 236

Grid: 10 x 6 Points

E_{av} [lx]
27

E_{min} [lx]
12

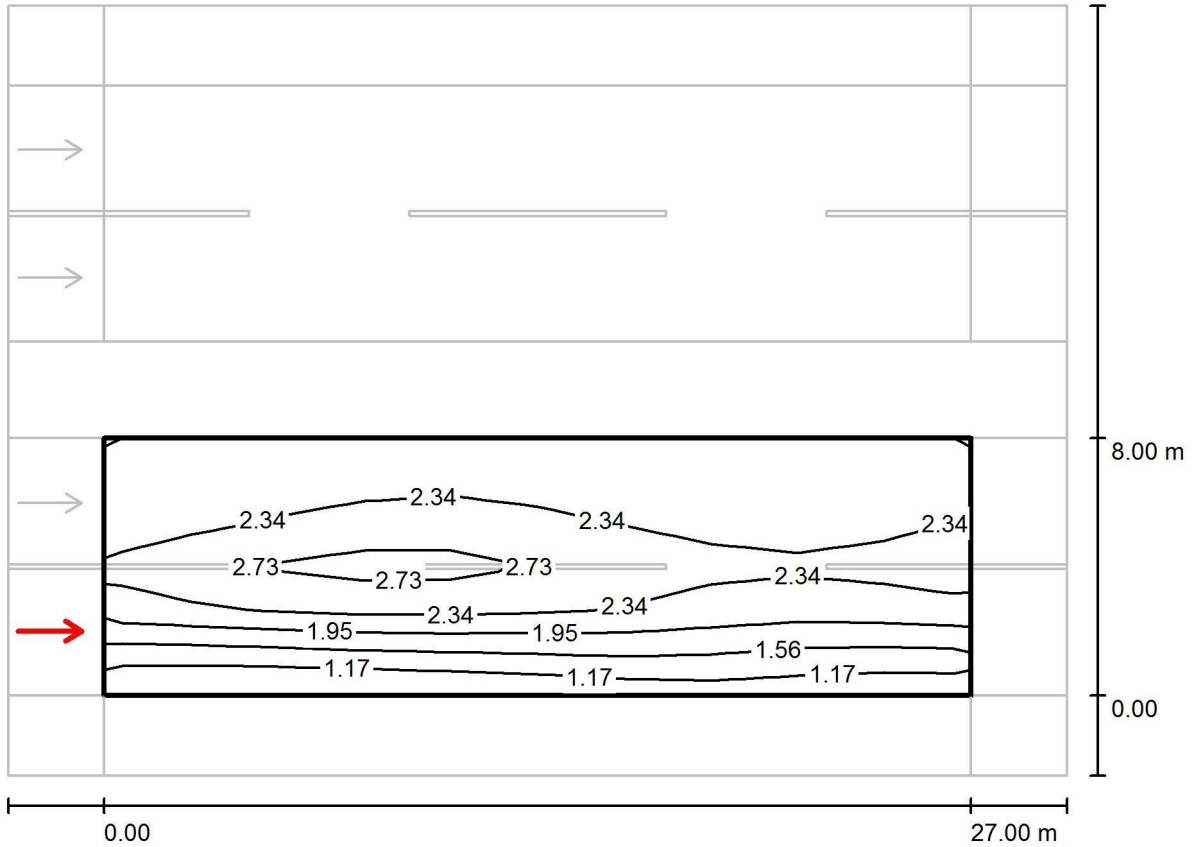
E_{max} [lx]
39

$u0$
0.437

E_{min} / E_{max}
0.298

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Projeto Luminotécnico / Via / Observador 1 / Isolines (L)



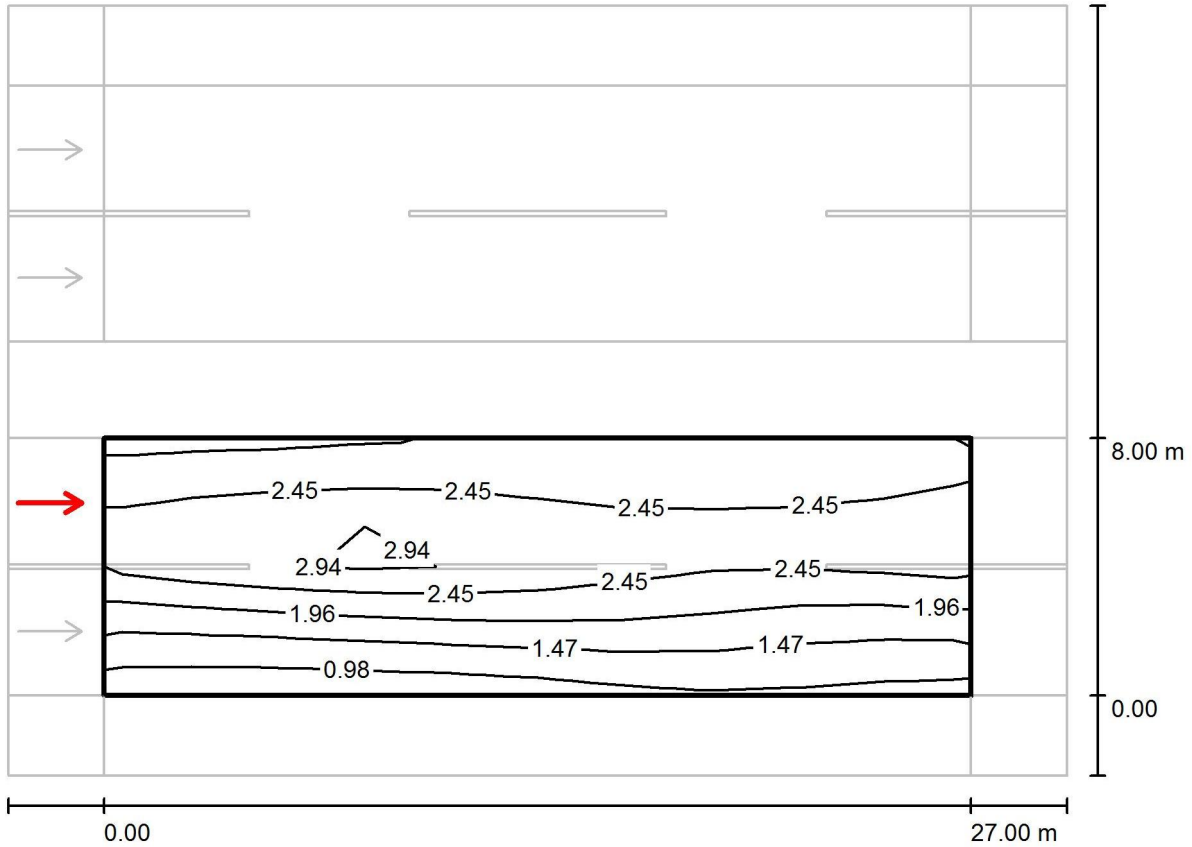
Values in Candela/m², Scale 1 : 236

Grid: 10 x 6 Points
Observer Position: (-60.000 m, 2.000 m, 1.500 m)
tarmac: R3, q0: 0.070

	L_{av} [cd/m²]	U0	UI	TI [%]
Calculated values:	2.09	0.48	0.88	10
Required values according to class ME4a:	≥ 2.00	≥ 0.40	≥ 0.70	≤ 10
Fulfilled/Not fulfilled:	✓	✓	✓	✓

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Projeto Luminotécnico / Via / Observador 2 / Isolines (L)



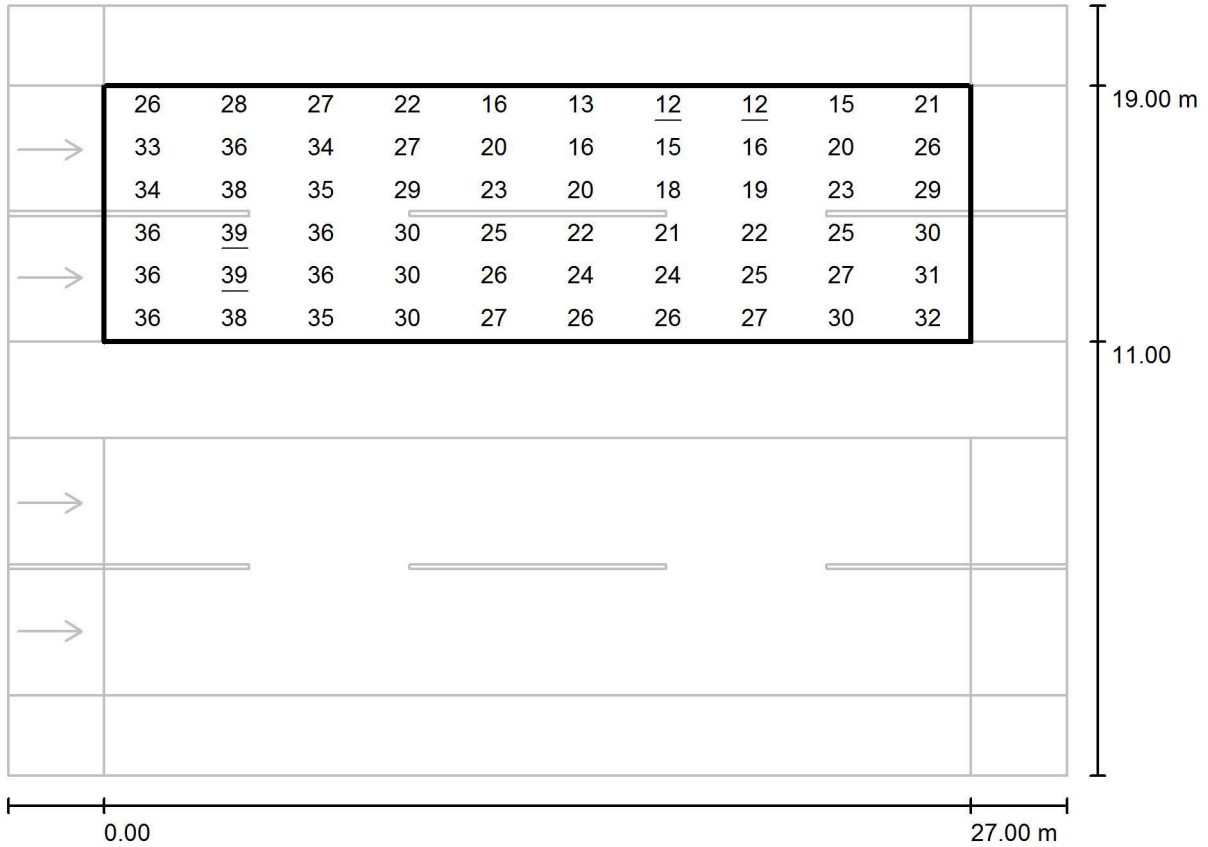
Values in Candela/m², Scale 1 : 236

Grid: 10 x 6 Points
Observer Position: (-60.000 m, 6.000 m, 1.500 m)
tarmac: R3, q0: 0.070

	L_{av} [cd/m ²]	U0	UI	TI [%]
Calculated values:	2.10	0.42	0.91	10
Required values according to class ME4a:	≥ 2.00	≥ 0.40	≥ 0.70	≤ 10
Fulfilled/Not fulfilled:	✓	✓	✓	✓

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Projeto Luminotécnico / Via / Value Chart (E)



Values in Lux, Scale 1 : 236

Grid: 10 x 6 Points

E_{av} [lx]
27

E_{min} [lx]
12

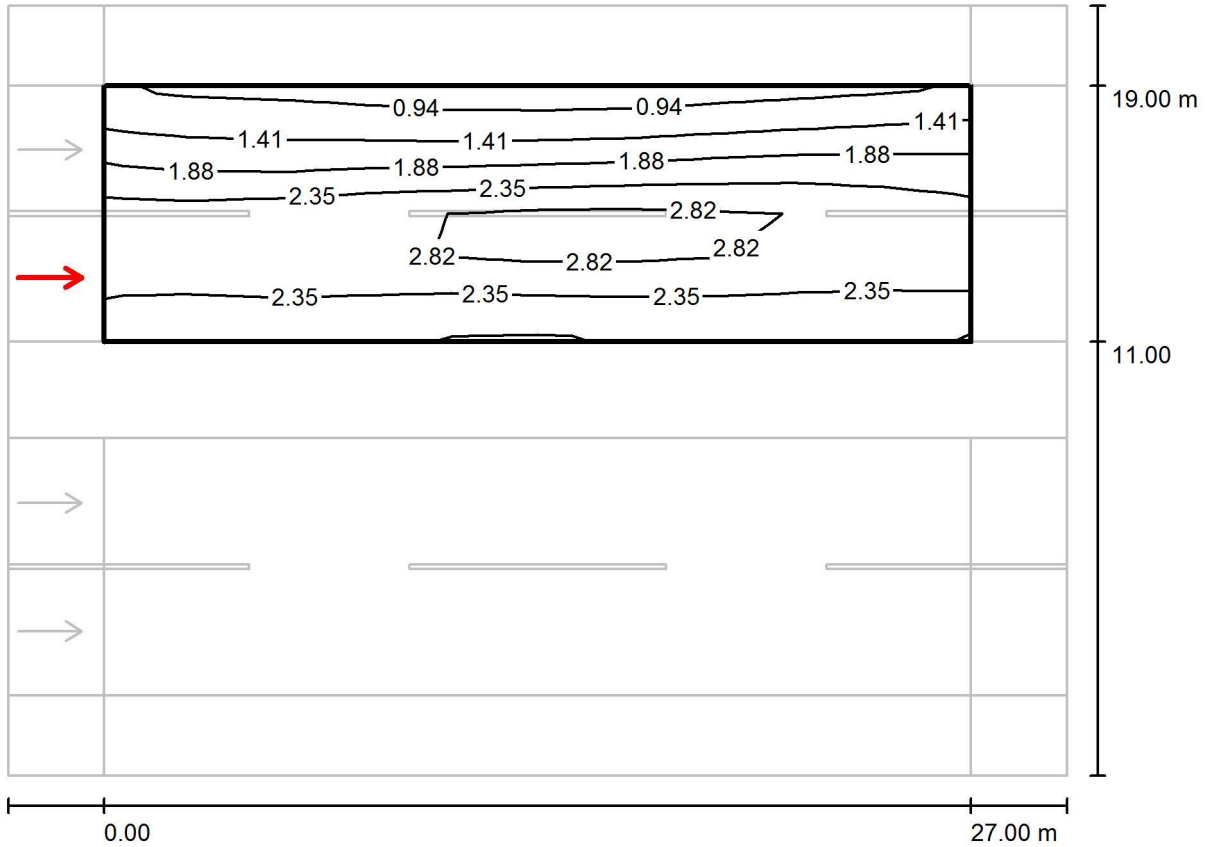
E_{max} [lx]
39

$u0$
0.437

E_{min} / E_{max}
0.298

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Projeto Luminotécnico / Via / Observador 3 / Isolines (L)



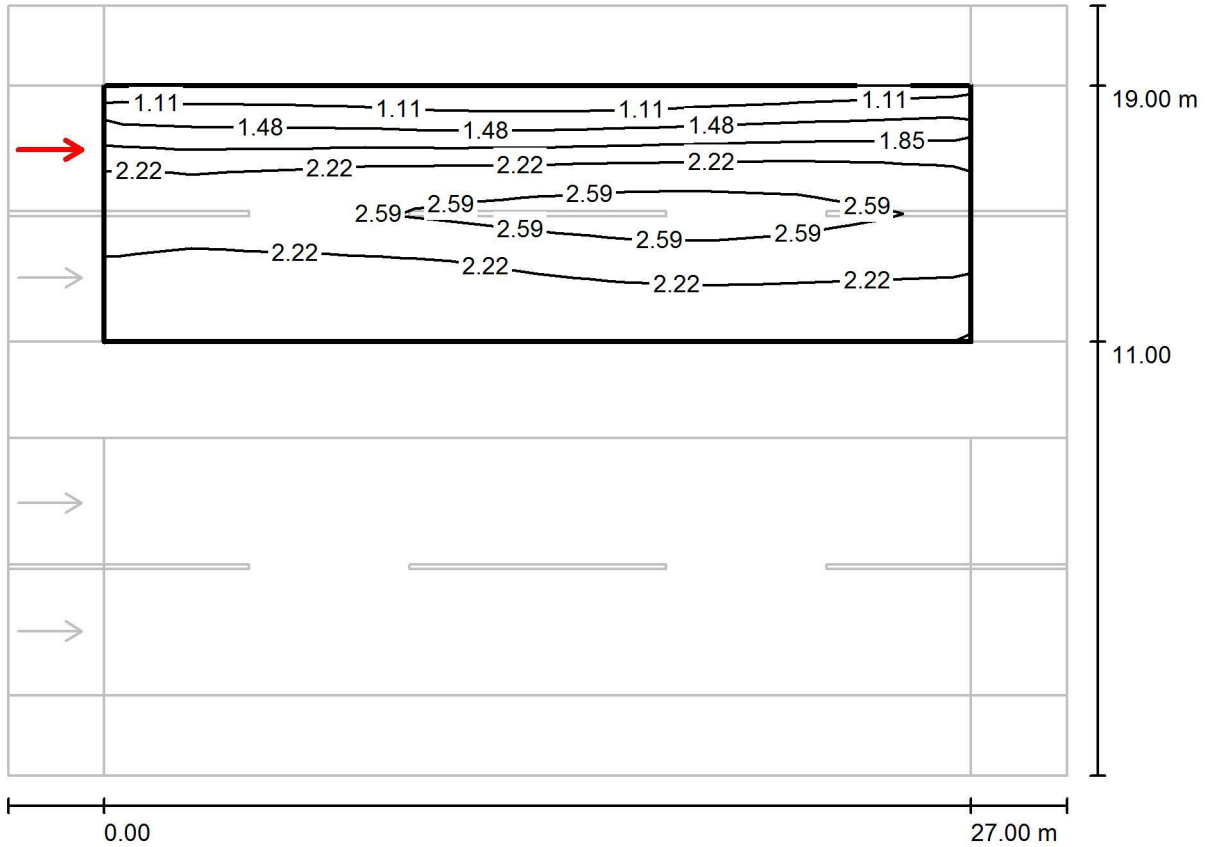
Values in Candela/m², Scale 1 : 236

Grid: 10 x 6 Points
Observer Position: (-60.000 m, 13.000 m, 1.500 m)
tarmac: R3, q0: 0.070

	L_{av} [cd/m ²]	U0	UI	TI [%]
Calculated values:	2.11	0.42	0.94	10
Required values according to class ME4a:	≥ 2.00	≥ 0.40	≥ 0.70	≤ 10
Fulfilled/Not fulfilled:	✓	✓	✓	✓

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Projeto Luminotécnico / Via / Observador 4 / Isolines (L)



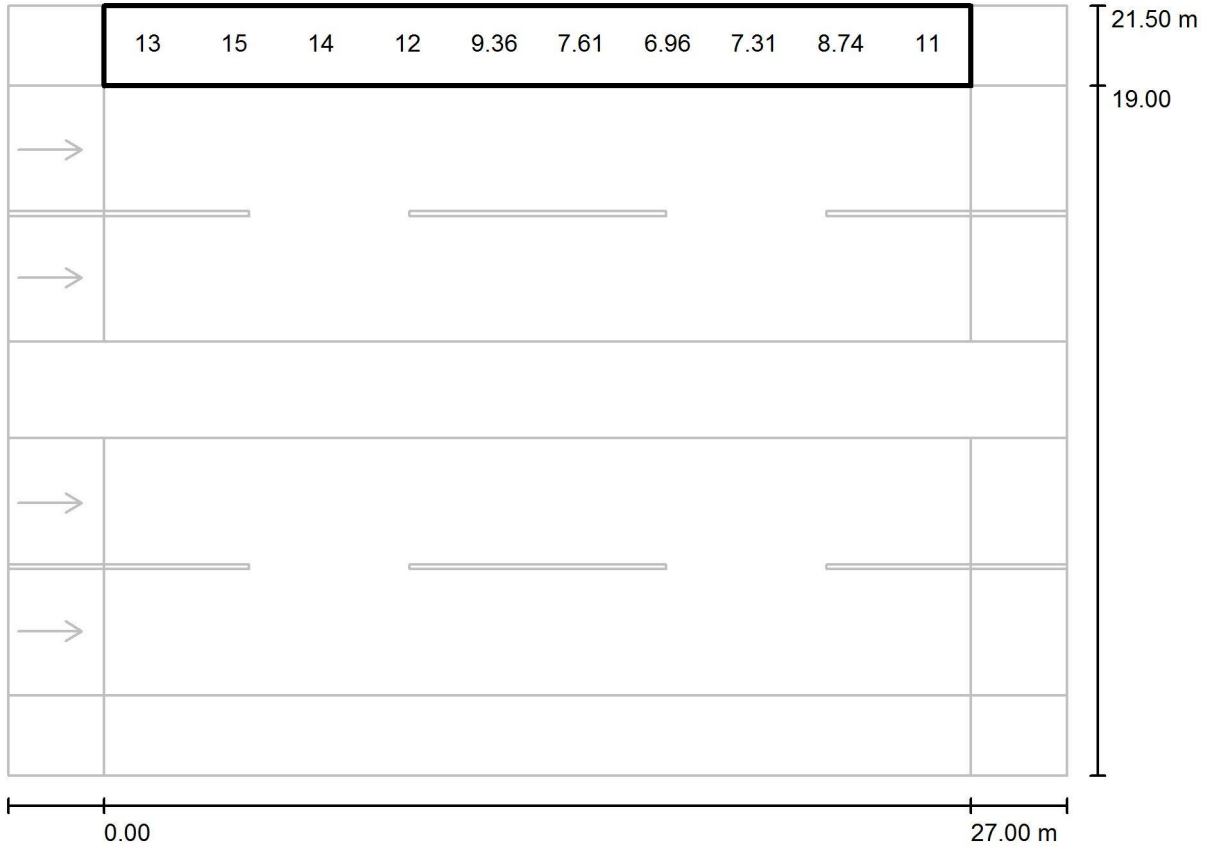
Values in Candela/m², Scale 1 : 236

Grid: 10 x 6 Points
Observer Position: (-60.000 m, 17.000 m, 1.500 m)
tarmac: R3, q0: 0.070

	L_{av} [cd/m²]	U0	UI	TI [%]
Calculated values:	2.07	0.49	0.89	10
Required values according to class ME4a:	≥ 2.00	≥ 0.40	≥ 0.70	≤ 10
Fulfilled/Not fulfilled:	✓	✓	✓	✓

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Projeto Luminotécnico / Calçada / Value Chart (E)



Values in Lux, Scale 1 : 236

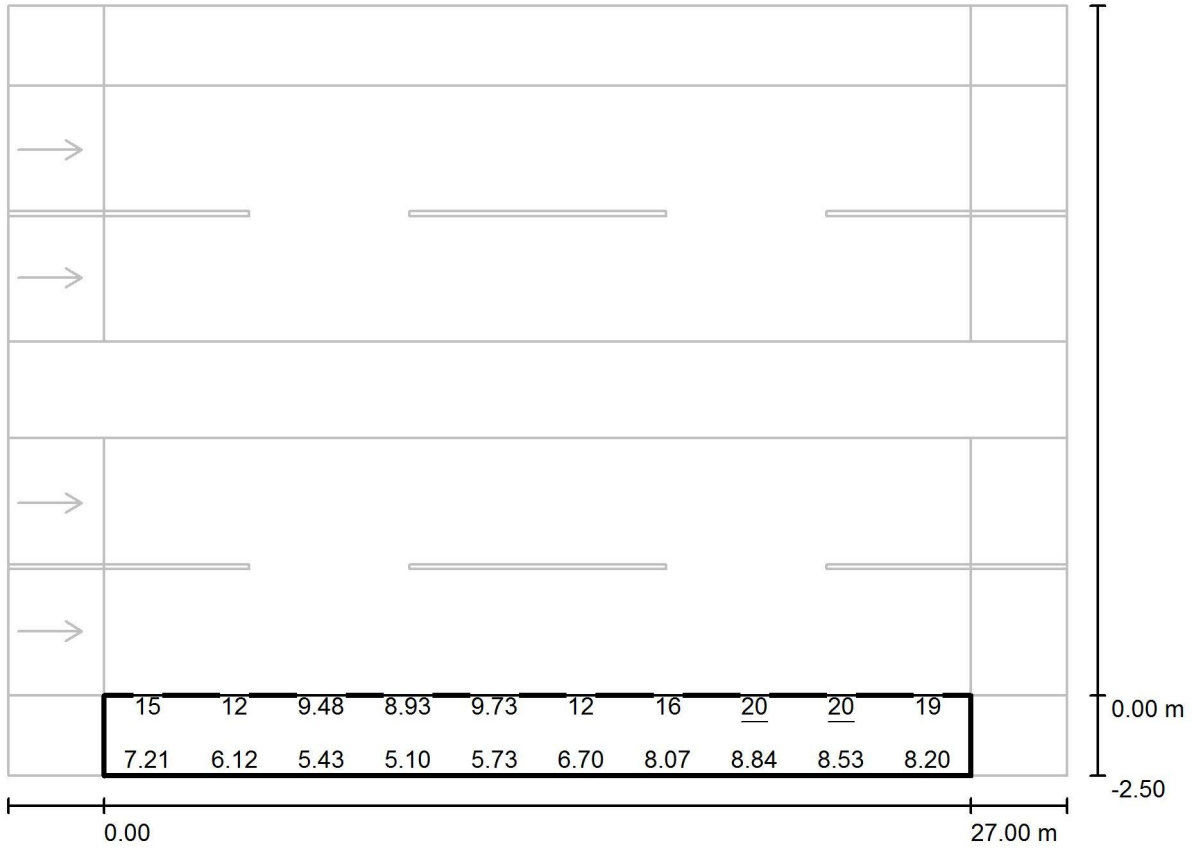
Not all calculated values could be displayed.

Grid: 10 x 3 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	$u0$	E_{min} / E_{max}
11	5.11	20	0.483	0.253

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Projeto Luminotécnico / Calçada / Value Chart (E)



Values in Lux, Scale 1 : 236

Not all calculated values could be displayed.

Grid: 10 x 3 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	$u0$	E_{min} / E_{max}
11	5.10	20	0.483	0.252