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Date:
28.03.2019

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Date: 2019.04.10 08:52:21 EEST
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Location: Moldova

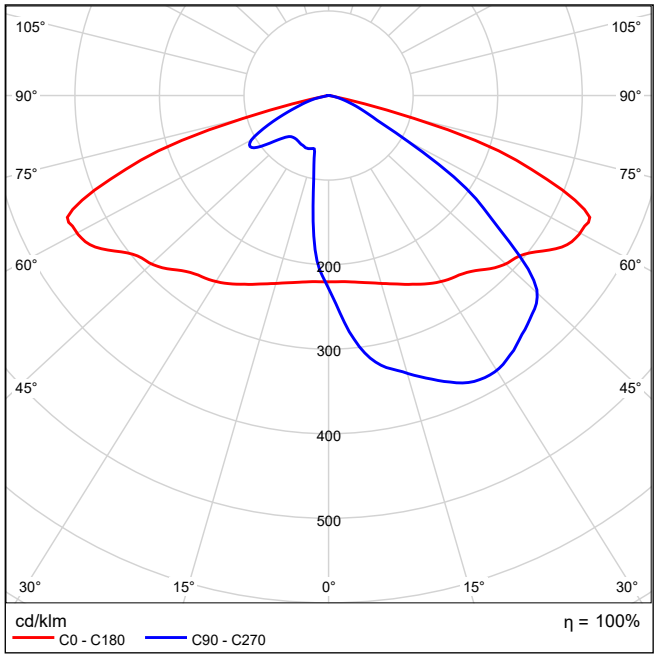
Table of contents

DIALux Micro Martin 15 W 4 LEDs MRUE 015 740 L05 A004 CSN DG1 1x4 LEDs bin M

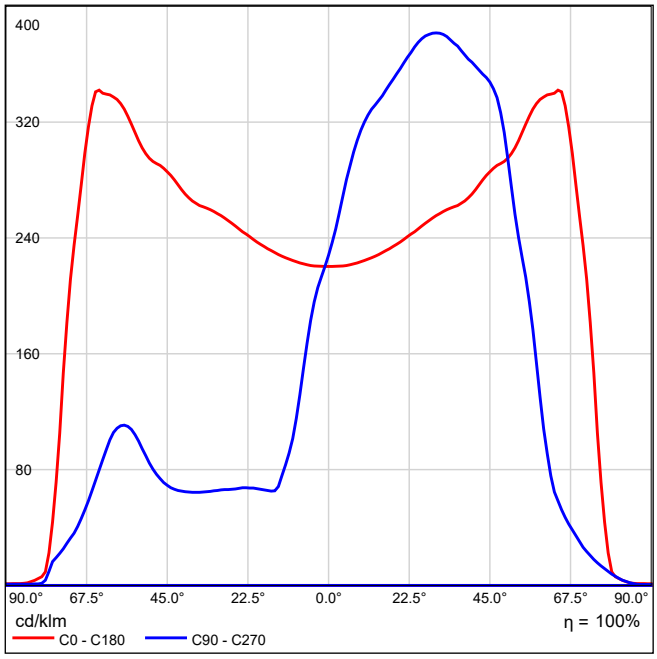
See our luminaire catalog for an image of the luminaire.

Light output ratio: 100%
Lamp luminous flux: 1819 lm
Luminaire luminous flux: 1819 lm
Power: 15.0 W
Luminous efficacy: 121.3 lm/W

Luminous emittance 1 / Polar LDC

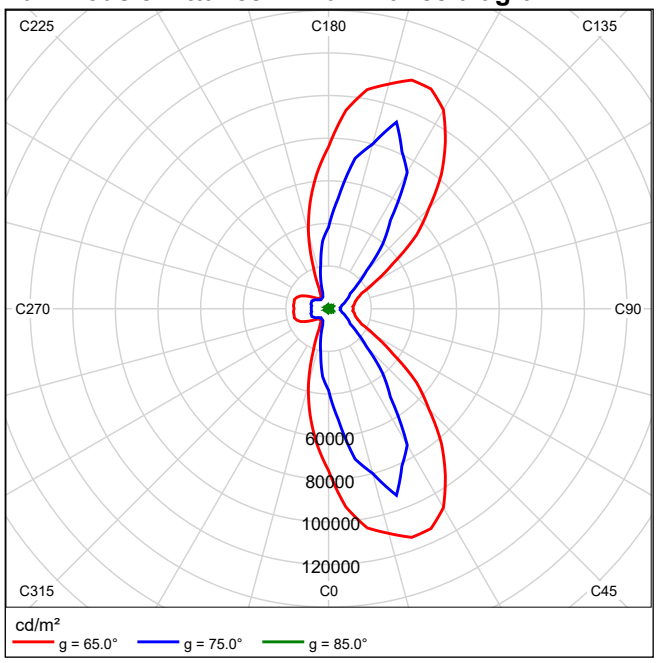


Luminous emittance 1 / Linear LDC



It is not possible to generate a cone diagram, as the light distribution is asymmetrical.

Luminous emittance 1 / Luminance diagram



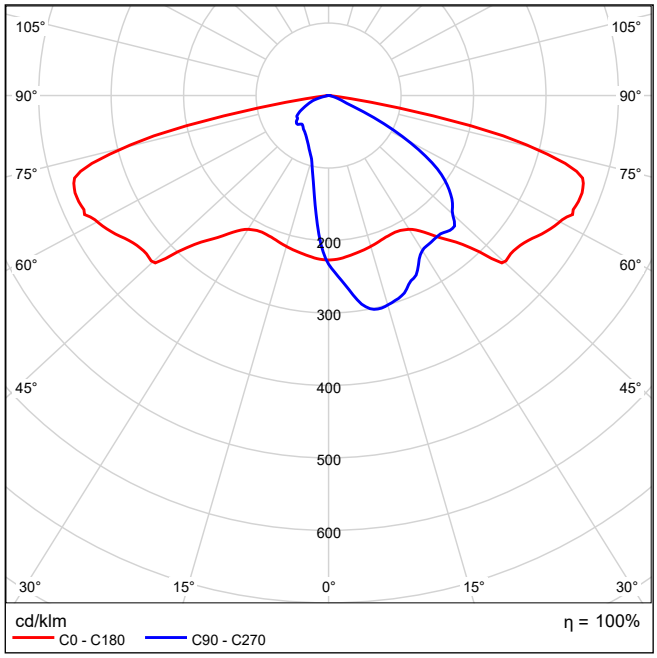
It is not possible to generate a UGR diagram, as the light distribution is asymmetrical.

DIALux Micro Martin 35 W 8 LEDs MRUE 035 740 L22 A008 CSN DG1 1x8 LEDs bin M

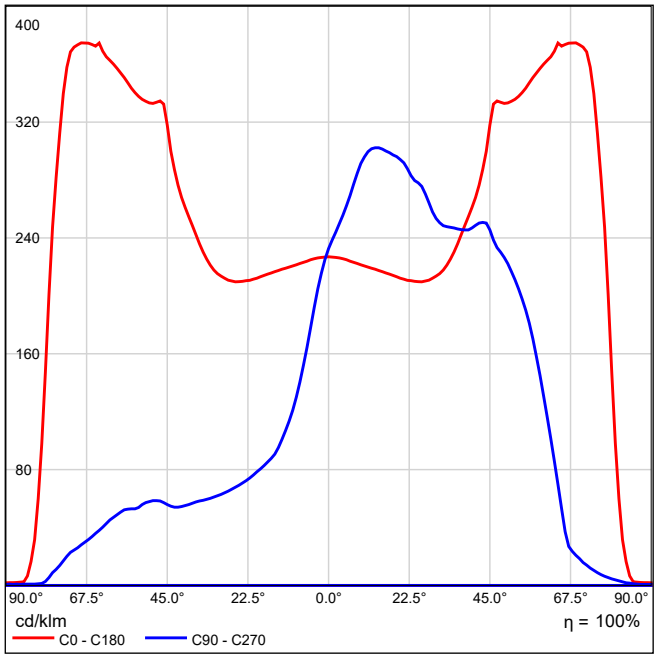
See our luminaire catalog for an image of the luminaire.

Light output ratio: 100%
Lamp luminous flux: 4112 lm
Luminaire luminous flux: 4112 lm
Power: 35.0 W
Luminous efficacy: 117.5 lm/W

Luminous emittance 1 / Polar LDC

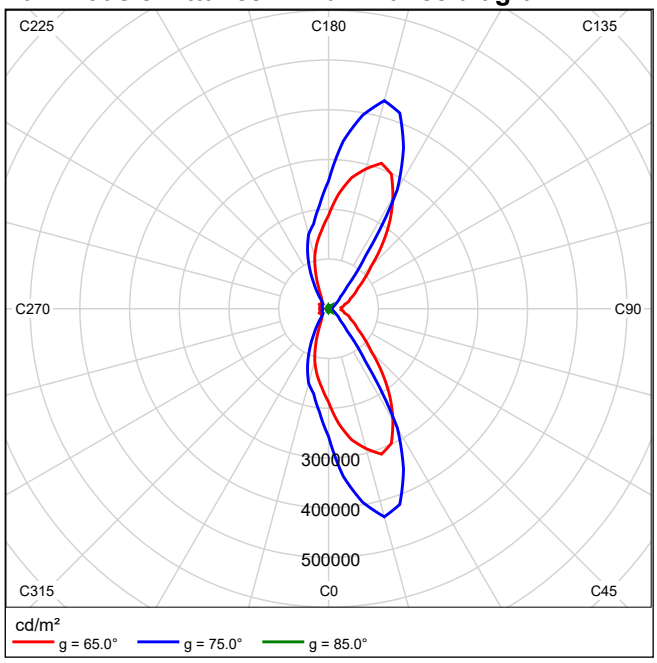


Luminous emittance 1 / Linear LDC



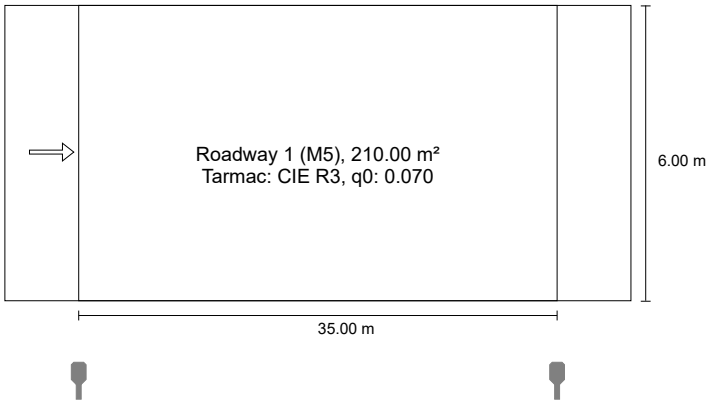
It is not possible to generate a cone diagram, as the light distribution is asymmetrical.

Luminous emittance 1 / Luminance diagram

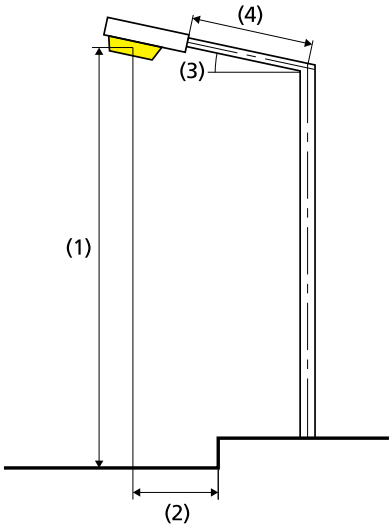


It is not possible to generate a UGR diagram, as the light distribution is asymmetrical.

Ștefan cel Mare according to EN 13201:2015



DIALux Micro Martin 35 W 8 LEDs MRUE 035 740 L22 A008 CSN DG1



Results for valuation fields

Light loss factor: 0.85

Roadway 1 (M5)

Lm [cd/m²] ≥ 0.50	Uo ≥ 0.35	Ul ≥ 0.40	TI [%] ≤ 15	EIR ≥ 0.30
✓ 0.51	✓ 0.50	✓ 0.67	✓ 11	✓ 0.36

Results for energy efficiency indicators

Power density indicator (Dp)	0.022 W/lxm²
Energy consumption density	
Arrangement: MRUE 035 740 L22 A008 CSN DG1 (140.0 kWh/yr)	0.7 kWh/m² yr

Lamp:	1x8 LEDs bin M
Luminous flux (luminaire):	4112.19 lm
Luminous flux (lamp):	4112.00 lm
Operating Hours	
4000 h:	100.0 %, 35.0 W
W/km:	1015.0
Arrangement:	single side bottom
Pole distance:	35.000 m
Boom inclination (3):	0.0°
Boom length (4):	0.500 m
Light centre height (1):	7.000 m
Light overhang (2):	-1.500 m

ULR:	0.00
ULOR:	0.00
Maximum luminous intensities	
at 70° and above	605 cd/klm *
at 80° and above	210 cd/klm *
at 90° and above	2.15 cd/klm *
Luminous intensity class:	/

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

* Luminous intensity values in [cd/klm] for calculating luminous intensity class refer to the output flux of the luminaire, according EN 13201:2015.

Arrangement complies with glare index class D.6

Roadway 1 (M5)

Light loss factor: 0.85
Grid: 12 x 3 Points

Lm [cd/m²] ≥ 0.50	Uo ≥ 0.35	Ul ≥ 0.40	TI [%] ≤ 15	EIR ≥ 0.30
✔ 0.51	✔ 0.50	✔ 0.67	✔ 11	✔ 0.36

Assigned observer (1):

Observer	Position [m]	Lm [cd/m²] ≥ 0.50	Uo ≥ 0.35	Ul ≥ 0.40	TI [%] ≤ 15
Observer 1	(-60.000, 3.000, 1.500)	0.51	0.50	0.67	11

Roadway 1 (M5)

Horizontal illuminance [lx]

5.000	7.16	6.75	6.21	5.18	4.31	3.77	3.77	4.31	5.18	6.21	6.75	7.16
3.000	10.7	10.9	9.28	6.77	4.93	4.02	4.02	4.93	6.77	9.28	10.9	10.7
1.000	**16.5**	14.2	10.9	6.82	4.68	**3.76**	**3.76**	4.68	6.82	10.9	14.2	**16.5**
m	**1.458**	**4.375**	**7.292**	**10.208**	**13.125**	**16.042**	**18.958**	**21.875**	**24.792**	**27.708**	**30.625**	**33.542**

Grid: 12 x 3 Points

Em [lx]	Emin [lx]	Emax [lx]	g1	g2
7.60	3.76	16.5	0.495	0.229

Observer 1

Luminance with dry roadway [cd/m²]

5.000	**0.25**	0.26	0.28	0.28	0.28	0.30	0.33	0.35	0.35	0.31	0.27	0.26
3.000	0.40	0.43	0.44	0.42	0.41	0.44	0.48	0.53	0.61	0.58	0.48	0.41
1.000	0.66	0.66	0.67	0.66	0.68	0.75	0.82	0.88	**0.95**	0.93	0.81	0.65
m	**1.458**	**4.375**	**7.292**	**10.208**	**13.125**	**16.042**	**18.958**	**21.875**	**24.792**	**27.708**	**30.625**	**33.542**

Grid: 12 x 3 Points

Lm [cd/m²]	Lmin [cd/m²]	Lmax [cd/m²]	g1	g2
0.51	0.25	0.95	0.499	0.267

Luminance with new lamp [cd/m²]

5.000	**0.30**	**0.30**	0.33	0.33	0.34	0.35	0.39	0.41	0.41	0.37	0.32	**0.30**
3.000	0.48	0.51	0.51	0.49	0.49	0.52	0.57	0.63	0.71	0.69	0.57	0.48
1.000	0.77	0.78	0.79	0.78	0.80	0.89	0.97	1.03	**1.12**	1.09	0.95	0.77
m	**1.458**	**4.375**	**7.292**	**10.208**	**13.125**	**16.042**	**18.958**	**21.875**	**24.792**	**27.708**	**30.625**	**33.542**

Grid: 12 x 3 Points

Lm [cd/m²]	Lmin [cd/m²]	Lmax [cd/m²]	g1	g2
0.60	0.30	1.12	0.499	0.267

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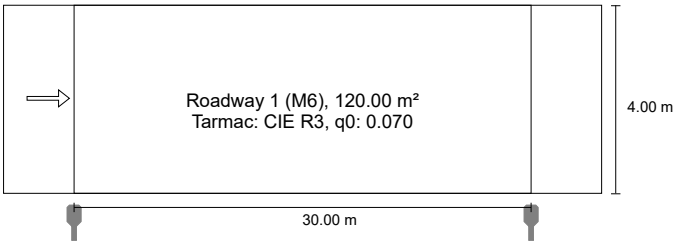


Results for valuation fields
Light loss factor: 0.85

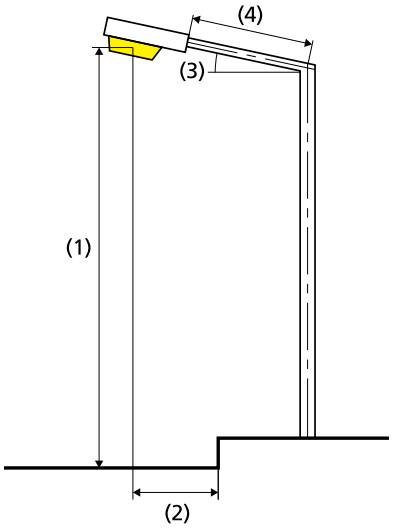
Roadway 1 (M6)

Lm [cd/m²] ≥ 0.30	Uo ≥ 0.35	Ul ≥ 0.40	TI [%] ≤ 20	EIR ≥ 0.30
✓ 0.30	✓ 0.63	✓ 0.62	✓ 7	✓ 0.44

Results for energy efficiency indicators

Power density indicator (Dp)	0.025 W/lxm²
Energy consumption density	
Arrangement: MRUE 015 740 L05 A004 CSN DG1 (60.0 kWh/yr)	0.5 kWh/m² yr

DIALux Micro Martin 15 W 4 LEDs MRUE 015 740 L05 A004 CSN DG1



Lamp:	1x4 LEDs bin M
Luminous flux (luminaire):	1819.07 lm
Luminous flux (lamp):	1819.00 lm
Operating Hours	
4000 h:	100.0 %, 15.0 W
W/km:	495.0
Arrangement:	single side bottom
Pole distance:	30.000 m
Boom inclination (3):	0.0°
Boom length (4):	0.500 m
Light centre height (1):	7.000 m
Light overhang (2):	-0.500 m

ULR:	0.00
ULOR:	0.00
Maximum luminous intensities	
at 70° and above	425 cd/klm *
at 80° and above	26.4 cd/klm *
at 90° and above	1.48 cd/klm *
Luminous intensity class:	G*4

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

* Luminous intensity values in [cd/klm] for calculating luminous intensity class refer to the output flux of the luminaire, according EN 13201:2015.

Arrangement complies with glare index class D.6

Roadway 1 (M6)

Light loss factor: 0.85
Grid: 10 x 3 Points

Lm [cd/m²] ≥ 0.30	Uo ≥ 0.35	Ul ≥ 0.40	TI [%] ≤ 20	EIR ≥ 0.30
✓ 0.30	✓ 0.63	✓ 0.62	✓ 7	✓ 0.44

Assigned observer (1):

Observer	Position [m]	Lm [cd/m²] ≥ 0.30	Uo ≥ 0.35	Ul ≥ 0.40	TI [%] ≤ 20
Observer 1	(-60.000, 2.000, 1.500)	0.30	0.63	0.62	7

Roadway 1 (M6)

Horizontal illuminance [lx]

3.333	7.95	6.37	4.39	2.86	2.16	2.16	2.86	4.39	6.37	7.95
2.000	9.14	6.98	4.44	2.86	2.15	2.15	2.86	4.44	6.98	9.14
0.667	**9.26**	6.75	4.03	2.59	**1.97**	**1.97**	2.59	4.03	6.75	**9.26**
m	**1.500**	**4.500**	**7.500**	**10.500**	**13.500**	**16.500**	**19.500**	**22.500**	**25.500**	**28.500**

Grid: 10 x 3 Points

Em [lx]	Emin [lx]	Emax [lx]	g1	g2
4.93	1.97	9.26	0.399	0.212

Observer 1

Luminance with dry roadway [cd/m²]

3.333	0.24	0.21	**0.19**	**0.19**	0.20	0.23	0.27	0.29	0.28	0.26
2.000	0.28	0.24	0.23	0.25	0.28	0.32	0.37	0.36	0.37	0.30
0.667	0.29	0.27	0.27	0.31	0.38	0.43	**0.45**	0.42	0.39	0.33
m	**1.500**	**4.500**	**7.500**	**10.500**	**13.500**	**16.500**	**19.500**	**22.500**	**25.500**	**28.500**

Grid: 10 x 3 Points

Lm [cd/m²]	Lmin [cd/m²]	Lmax [cd/m²]	g1	g2
0.30	0.19	0.45	0.626	0.415

Luminance with new lamp [cd/m²]

3.333	0.28	0.25	0.23	**0.22**	0.23	0.27	0.32	0.34	0.33	0.31
2.000	0.32	0.28	0.27	0.29	0.33	0.38	0.43	0.42	0.43	0.36
0.667	0.34	0.31	0.32	0.37	0.44	0.50	**0.52**	0.50	0.46	0.39
m	**1.500**	**4.500**	**7.500**	**10.500**	**13.500**	**16.500**	**19.500**	**22.500**	**25.500**	**28.500**

Grid: 10 x 3 Points

Lm [cd/m²]	Lmin [cd/m²]	Lmax [cd/m²]	g1	g2
0.35	0.22	0.52	0.626	0.415