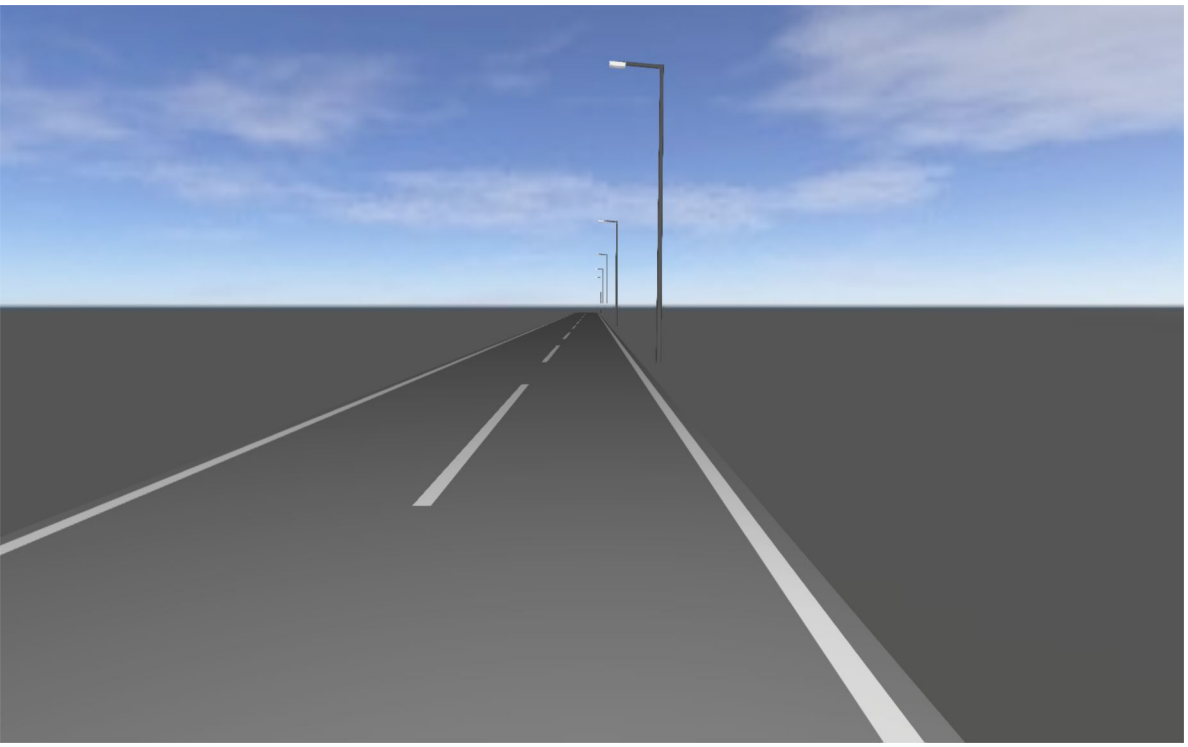


Līvānu pilsētas ielu apgaismojuma aprēķini

2. daļa

Created with DIALux

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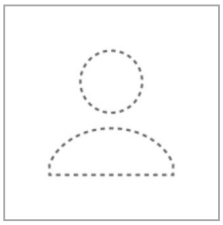
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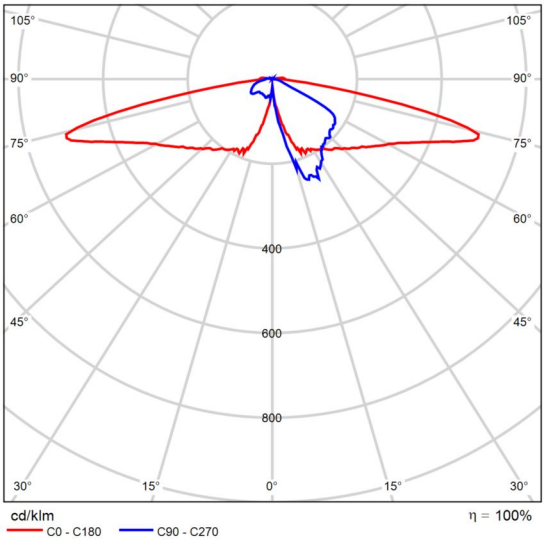
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Product data sheet

Not yet a DIALux member - LU 015 740 V22 AF024



Article No.	Luscinia 15 W 24 LED
P	15.0 W
Φ_{Lamp}	2205 lm
$\Phi_{Luminaire}$	2205 lm
η	100.00 %
Luminous efficacy	147.0 lm/W
CCT	4000 K
CRI	70

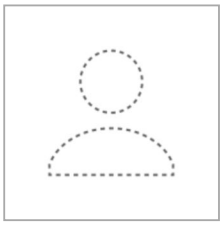


Polar LDC

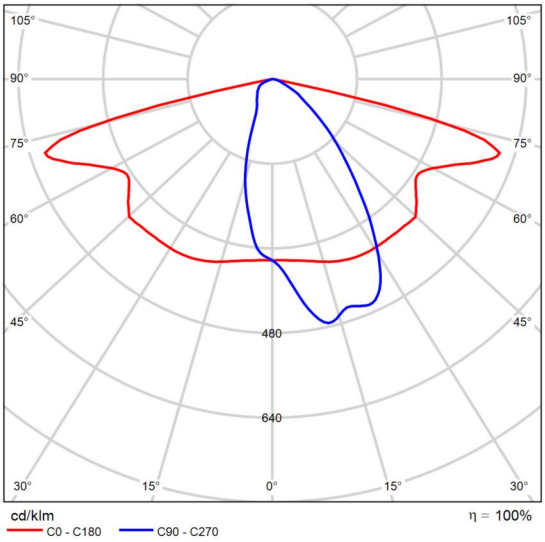
DIALux

Product data sheet

Not yet a DIALux member - SRU 015 740 L90 AA016_Bin-N8_TH



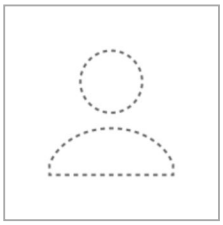
Article No.	Stork Little Sister 15 W 16 LEDs
P	15.0 W
Φ_{Lamp}	2194 lm
$\Phi_{Luminaire}$	2194 lm
η	100.00 %
Luminous efficacy	146.3 lm/W
CCT	4000 K
CRI	70



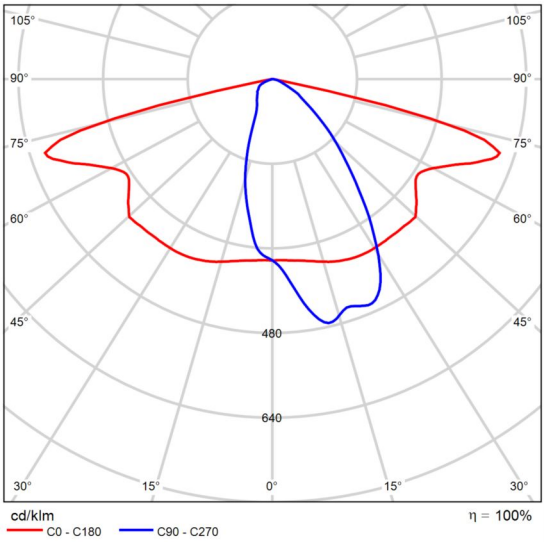
Polar LDC

Product data sheet

Not yet a DIALux member - SRU 020 740 L90 AA016_Bin-N8_TH



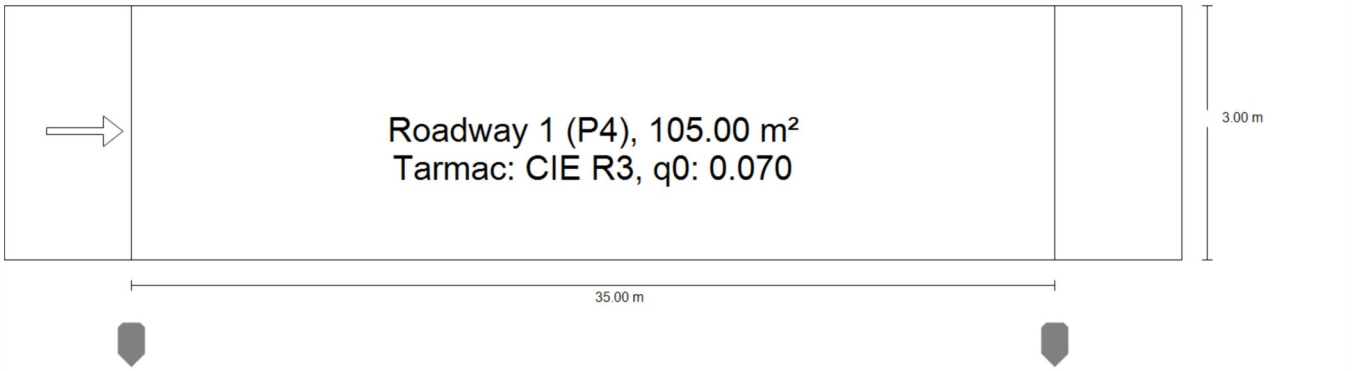
Article No.	Stork Little Sister 20 W 16 LEDs
P	20.0 W
Φ_{Lamp}	2923 lm
$\Phi_{Luminaire}$	2923 lm
η	100.00 %
Luminous efficacy	146.1 lm/W
CCT	4000 K
CRI	70



Polar LDC

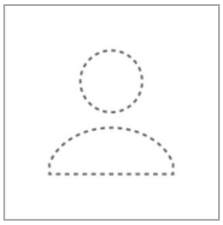
Avotu iela 2 - PII Pastariņi, Meža ielas skvērs

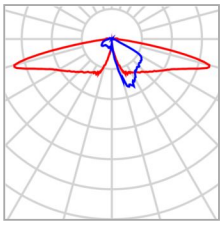
Summary (according to EN 13201:2015)



Avotu iela 2 - PII Pastariņi, Meža ielas skvērs

Summary (according to EN 13201:2015)

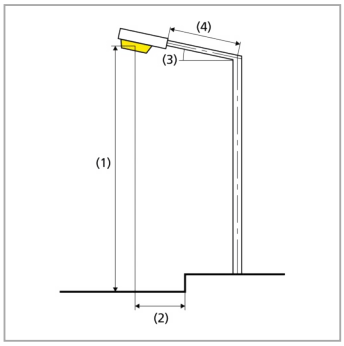




Manufacturer	Not yet a DIALux member
Article No.	Luscinia 15 W 24 LED
Article name	LU 015 740 V22 AF024
Fitting	1x 24 LED BIN N8 MOD AF

P	15.0 W
Φ_{Lamp}	2205 lm
$\Phi_{Luminaire}$	2205 lm
η	100.00 %

LU 015 740 V22 AF024 (single side bottom)



Pole distance	35.000 m
(1) Light spot height	4.000 m
(2) Light point overhang	-1.000 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 15.0 W
Consumption	435.0 W/km
ULR / ULOR	0.03 / 0.03
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 805 cd/klm ≥ 80°: 431 cd/klm ≥ 90°: 30.5 cd/klm
Luminous intensity class 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.3

Avotu iela 2 - PII Pastariņi, Meža ielas skvērs

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (P4)	E_{av}	5.92 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.32 lx	≥ 1.00 lx	✓

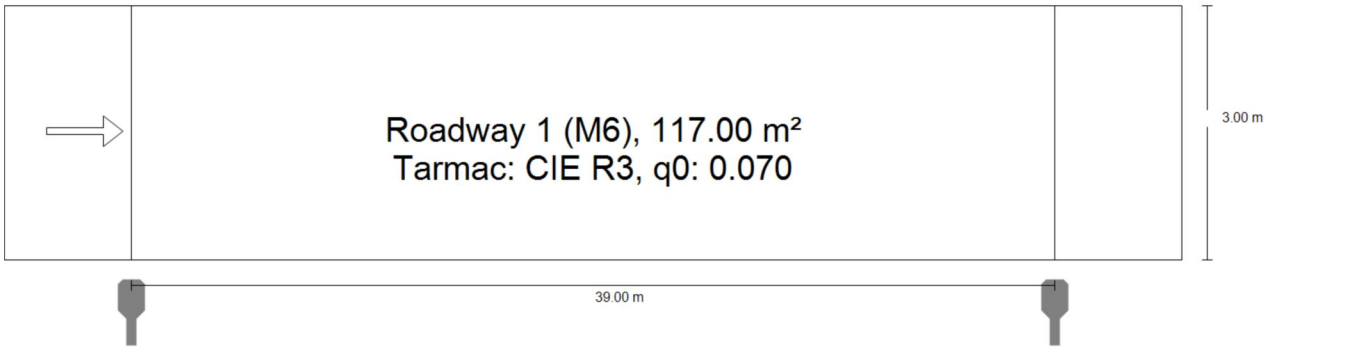
A maintenance factor of 0.80 was used for calculating for the installation.

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Avotu iela 2 - PII Pastariņi, Meža ielas skvērs	D_p	0.024 W/lx*m²	-
LU 015 740 V22 AF024 (single side bottom)	D_e	0.6 kWh/m² yr,	60.0 kWh/yr

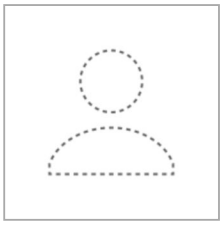
Blaumaņa iela (no mājas 1. līdz mājai 11.)

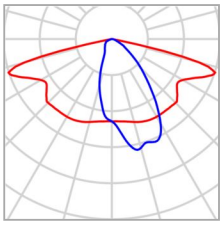
Summary (according to EN 13201:2015)



Blaumaņa iela (no mājas 1. līdz mājai 11.)

Summary (according to EN 13201:2015)

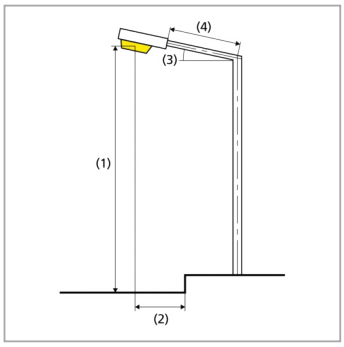




Manufacturer	Not yet a DIALux member
Article No.	Stork Little Sister 20 W 16 LEDs
Article name	SRU 020 740 L90 AA016_Bin-N8_TH
Fitting	1x 16 LEDs bin N8

P	20.0 W
Φ_{Lamp}	2923 lm
$\Phi_{Luminaire}$	2923 lm
η	100.00 %

SRU 020 740 L90 AA016_Bin-N8_TH (single side bottom)



Pole distance	39.000 m
(1) Light spot height	8.000 m
(2) Light point overhang	-0.490 m
(3) Boom inclination	15.0°
(4) Boom length	0.500 m
Annual operating hours	4000 h: 100.0 %, 20.0 W
Consumption	520.0 W/km
ULR / ULOR	0.00 / 0.00
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 976 cd/klm ≥ 80°: 375 cd/klm ≥ 90°: 12.3 cd/klm
Luminous intensity class 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

Blaumaņa iela (no mājas 1. līdz mājai 11.)

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (M6)	L_{av}	0.33 cd/m²	≥ 0.30 cd/m²	✓
	U_o	0.68	≥ 0.35	✓
	U_l	0.72	≥ 0.40	✓
	TI	11 %	≤ 20 %	✓
	R_{EI}	0.31	≥ 0.30	✓

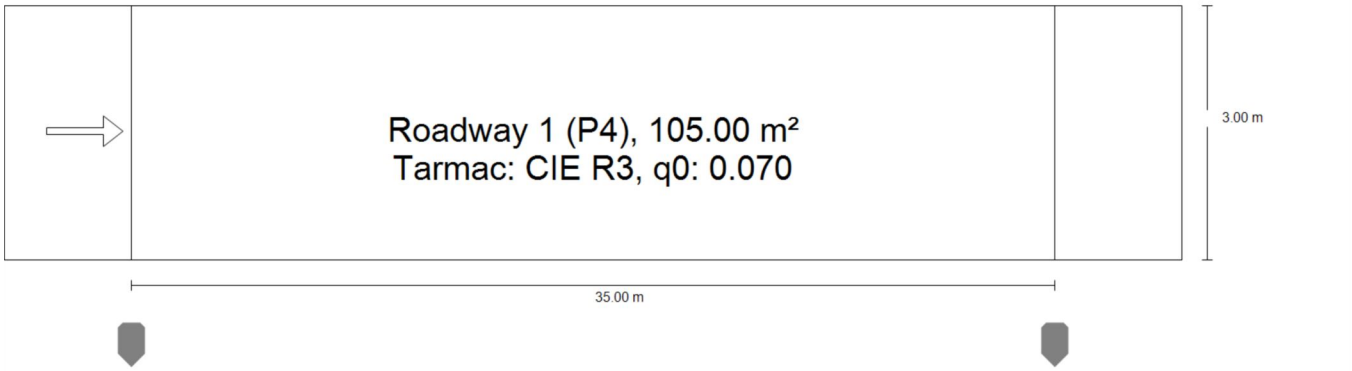
A maintenance factor of 0.80 was used for calculating for the installation.

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Blaumaņa iela (no mājas 1. līdz mājai 11.)	D_p	0.036 W/lx*m²	-
SRU 020 740 L90 AA016_Bin-N8_TH (single side bottom)	D_e	0.7 kWh/m² yr,	80.0 kWh/yr

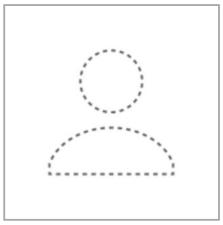
Domes iela 1 - Līvānu stikla un amatniecības centrs

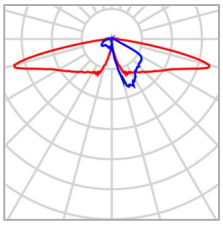
Summary (according to EN 13201:2015)



Domes iela 1 - Līvānu stikla un amatniecības centrs

Summary (according to EN 13201:2015)

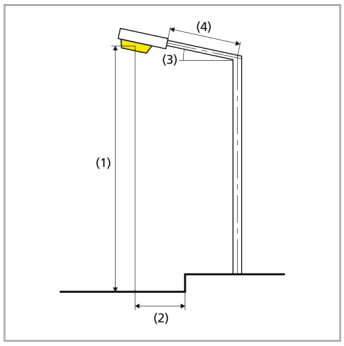




Manufacturer	Not yet a DIALux member
Article No.	Luscinia 15 W 24 LED
Article name	LU 015 740 V22 AF024
Fitting	1x 24 LED BIN N8 MOD AF

P	15.0 W
Φ_{Lamp}	2205 lm
$\Phi_{Luminaire}$	2205 lm
η	100.00 %

LU 015 740 V22 AF024 (single side bottom)



Pole distance	35.000 m
(1) Light spot height	4.000 m
(2) Light point overhang	-1.000 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 15.0 W
Consumption	435.0 W/km
ULR / ULOR	0.03 / 0.03
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 805 cd/klm ≥ 80°: 431 cd/klm ≥ 90°: 30.5 cd/klm
Luminous intensity class 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.3

Domes iela 1 - Līvānu stikla un amatniecības centrs

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (P4)	E_{av}	5.92 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.32 lx	≥ 1.00 lx	✓

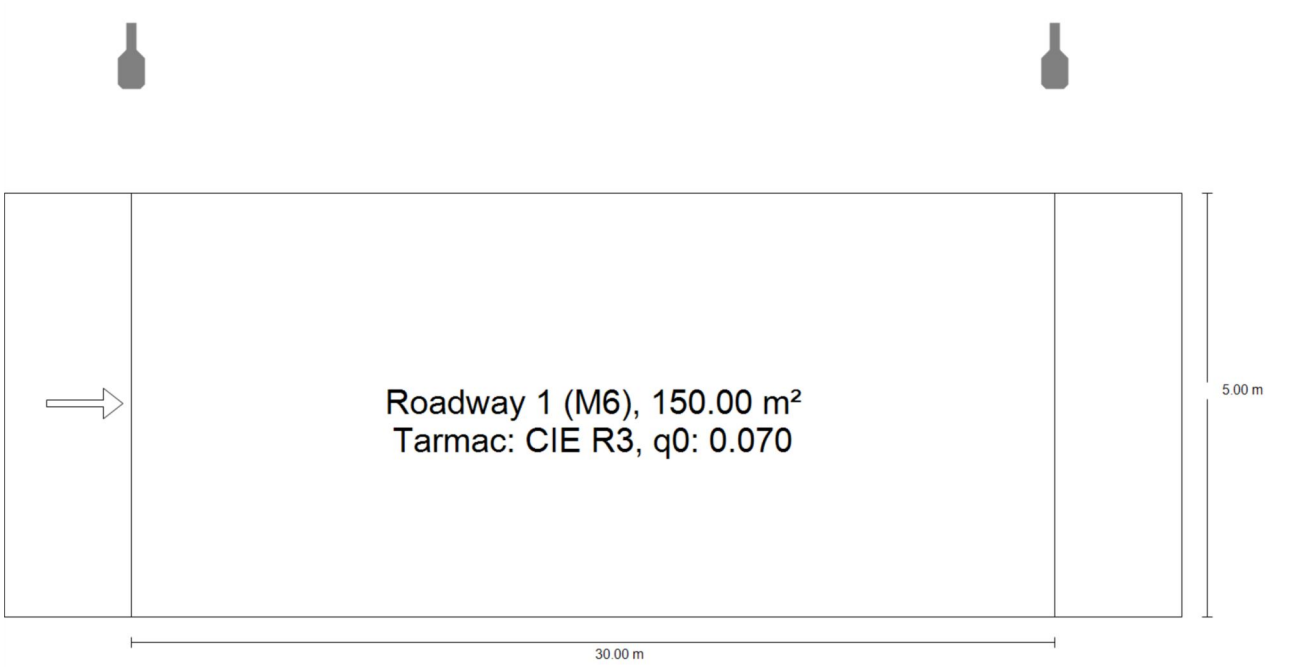
A maintenance factor of 0.80 was used for calculating for the installation.

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Domes iela 1 - Līvānu stikla un amatniecības centrs	D_p	0.024 W/lx*m²	-
LU 015 740 V22 AF024 (single side bottom)	D_e	0.6 kWh/m² yr,	60.0 kWh/yr

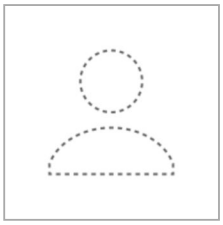
Domes iela 3 - Līvānu uzņēmējdarbības un atbalsta centrs, Rīgas iela 13 - PII Rūķīši teritorija

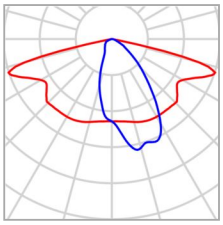
Summary (according to EN 13201:2015)



Domes iela 3 - Līvānu uzņēmējdarbības un atbalsta centrs, Rīgas iela 13 - PII Rūķīši teritorija

Summary (according to EN 13201:2015)

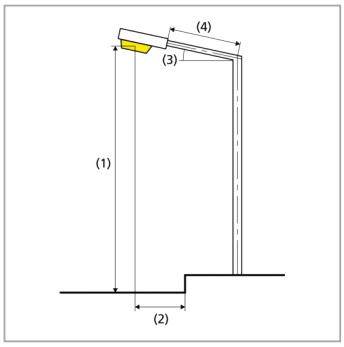




Manufacturer	Not yet a DIALux member
Article No.	Stork Little Sister 15 W 16 LEDs
Article name	SRU 015 740 L90 AA016_Bin-N8_TH
Fitting	1x 16 LEDs bin N8

P	15.0 W
Φ_{Lamp}	2194 lm
$\Phi_{Luminaire}$	2194 lm
η	100.00 %

SRU 015 740 L90 AA016_Bin-N8_TH (single side top)



Pole distance	30.000 m
(1) Light spot height	8.000 m
(2) Light point overhang	-1.490 m
(3) Boom inclination	15.0°
(4) Boom length	0.500 m
Annual operating hours	4000 h: 100.0 %, 15.0 W
Consumption	495.0 W/km
ULR / ULOR	0.00 / 0.00
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 976 cd/klm ≥ 80°: 375 cd/klm ≥ 90°: 12.3 cd/klm
Luminous intensity class 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

Domes iela 3 - Līvānu uzņēmējdarbības un atbalsta centrs, Rīgas iela 13 - PII Rūķīši teritorija

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (M6)	L_{av}	0.34 cd/m²	≥ 0.30 cd/m²	✓
	U_o	0.76	≥ 0.35	✓
	U_l	0.79	≥ 0.40	✓
	TI	11 %	≤ 20 %	✓
	R_{EI}	0.31	≥ 0.30	✓

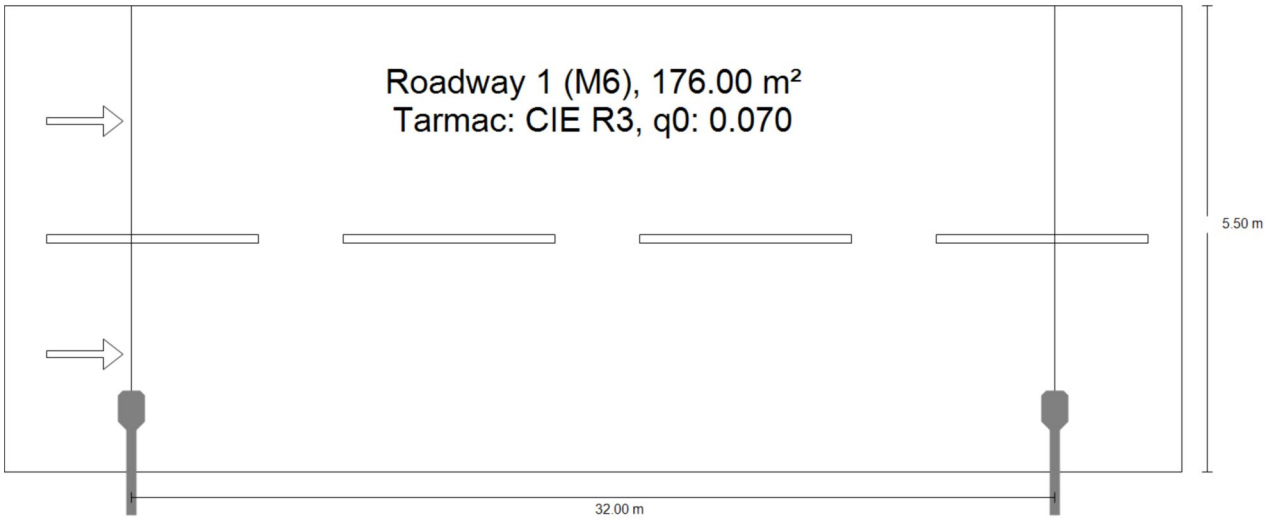
A maintenance factor of 0.80 was used for calculating for the installation.

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Domes iela 3 - Līvānu uzņēmējdarbības un atbalsta centrs, Rīgas iela 13 - PII Rūķīši teritorija	D_p	0.018 W/lx*m²	-
SRU 015 740 L90 AA016_Bin-N8_TH (single side top)	D_e	0.4 kWh/m² yr,	60.0 kWh/yr

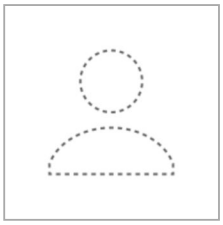
K. Valdemāra iela

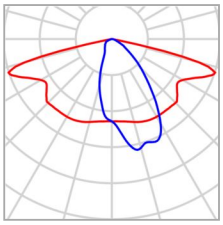
Summary (according to EN 13201:2015)



K. Valdemāra iela

Summary (according to EN 13201:2015)

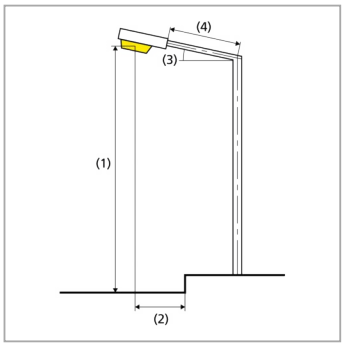




Manufacturer	Not yet a DIALux member
Article No.	Stork Little Sister 15 W 16 LEDs
Article name	SRU 015 740 L90 AA016_Bin-N8_TH
Fitting	1x 16 LEDs bin N8

P	15.0 W
Φ_{Lamp}	2194 lm
$\Phi_{Luminaire}$	2194 lm
η	100.00 %

SRU 015 740 L90 AA016_Bin-N8_TH (single side bottom)



Pole distance	32.000 m
(1) Light spot height	8.000 m
(2) Light point overhang	0.704 m
(3) Boom inclination	5.0°
(4) Boom length	1.200 m
Annual operating hours	4000 h: 100.0 %, 15.0 W
Consumption	465.0 W/km
ULR / ULOR	0.00 / 0.00
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 978 cd/klm ≥ 80°: 51.9 cd/klm ≥ 90°: 1.80 cd/klm
Luminous intensity class 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.	G*3
Glare index class	D.6

K. Valdemāra iela

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (M6)	L_{av}	0.37 cd/m²	≥ 0.30 cd/m²	✓
	U_o	0.49	≥ 0.35	✓
	U_l	0.79	≥ 0.40	✓
	TI	11 %	≤ 20 %	✓
	R_{EI}	0.33	≥ 0.30	✓

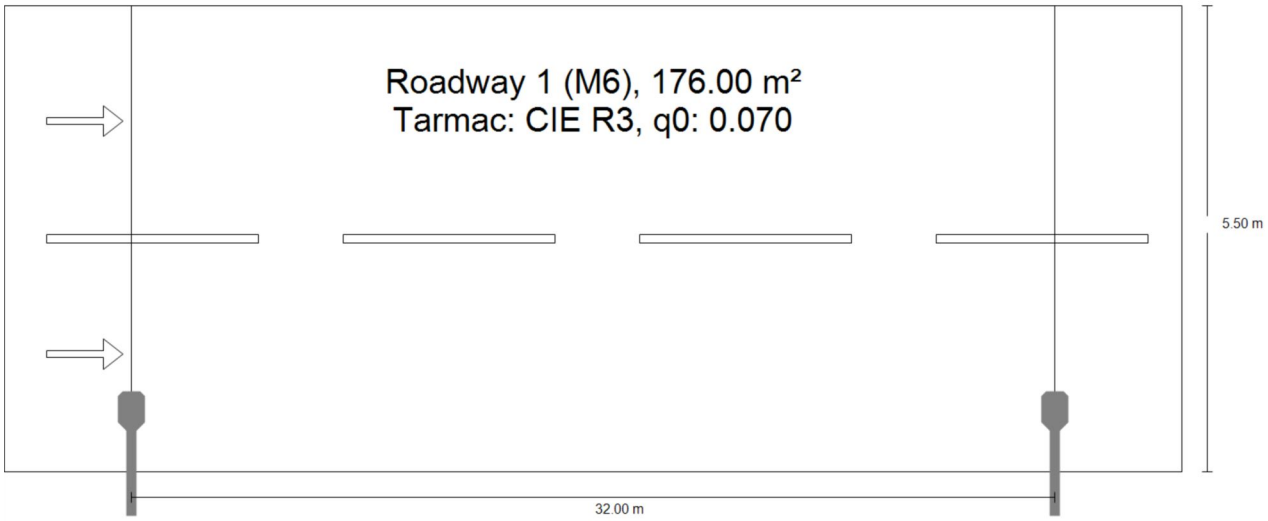
A maintenance factor of 0.80 was used for calculating for the installation.

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
K. Valdemāra iela	D_p	0.016 W/lx*m²	-
SRU 015 740 L90 AA016_Bin-N8_TH (single side bottom)	D_e	0.3 kWh/m² yr,	60.0 kWh/yr

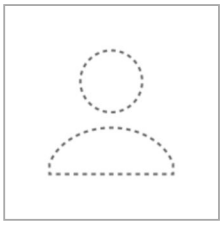
Kuldīgas iela no 1. mājas līdz līdz Jelgavas ielai)

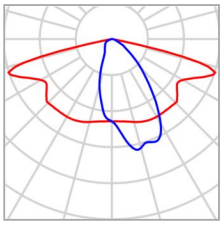
Summary (according to EN 13201:2015)



Kuldīgas iela no 1. mājas līdz līdz Jelgavas ielai)

Summary (according to EN 13201:2015)

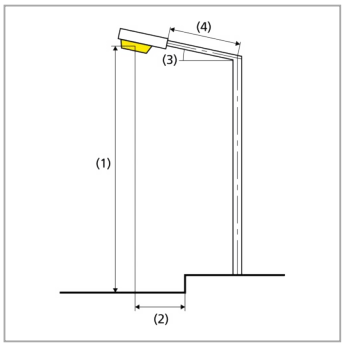




Manufacturer	Not yet a DIALux member
Article No.	Stork Little Sister 15 W 16 LEDs
Article name	SRU 015 740 L90 AA016_Bin-N8_TH
Fitting	1x 16 LEDs bin N8

P	15.0 W
Φ_{Lamp}	2194 lm
$\Phi_{Luminaire}$	2194 lm
η	100.00 %

SRU 015 740 L90 AA016_Bin-N8_TH (single side bottom)



Pole distance	32.000 m
(1) Light spot height	8.000 m
(2) Light point overhang	0.686 m
(3) Boom inclination	0.0°
(4) Boom length	1.200 m
Annual operating hours	4000 h: 100.0 %, 15.0 W
Consumption	465.0 W/km
ULR / ULOR	0.00 / 0.00
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 970 cd/klm ≥ 80°: 16.8 cd/klm ≥ 90°: 0.00 cd/klm
Luminous intensity class 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.	G*3
Glare index class	D.6

Kuldīgas iela no 1. mājas līdz līdz Jelgavas ielai)

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (M6)	L_{av}	0.41 cd/m²	≥ 0.30 cd/m²	✓
	U_o	0.65	≥ 0.35	✓
	U_l	0.82	≥ 0.40	✓
	TI	10 %	≤ 20 %	✓
	R_{EI}	0.41	≥ 0.30	✓

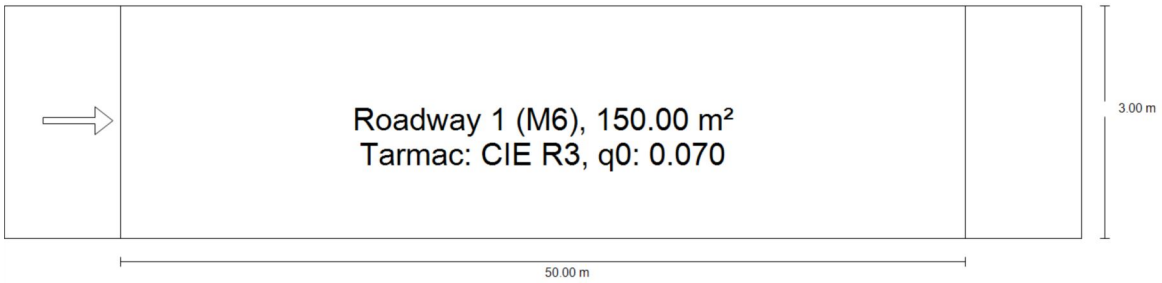
A maintenance factor of 0.80 was used for calculating for the installation.

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Kuldīgas iela no 1. mājas līdz līdz Jelgavas ielai)	D_p	0.014 W/lx*m²	-
SRU 015 740 L90 AA016_Bin-N8_TH (single side bottom)	D_e	0.3 kWh/m² yr,	60.0 kWh/yr

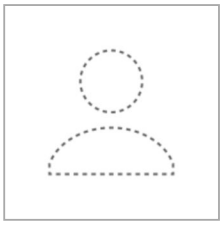
Lauku iela (no 1. mājas līdz 26A mājai)

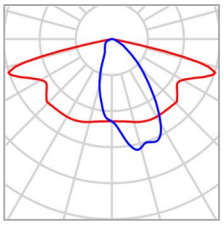
Summary (according to EN 13201:2015)



Lauku iela (no 1. mājas līdz 26A mājai)

Summary (according to EN 13201:2015)

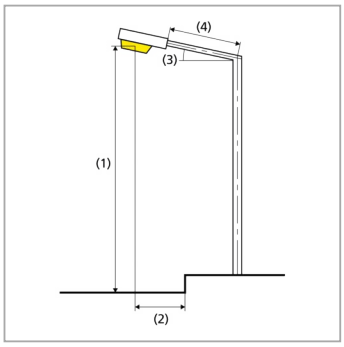




Manufacturer	Not yet a DIALux member
Article No.	Stork Little Sister 20 W 16 LEDs
Article name	SRU 020 740 L90 AA016_Bin-N8_TH
Fitting	1x 16 LEDs bin N8

P	20.0 W
Φ_{Lamp}	2923 lm
$\Phi_{Luminaire}$	2923 lm
η	100.00 %

SRU 020 740 L90 AA016_Bin-N8_TH (both sides offset)



Pole distance	50.000 m
(1) Light spot height	7.000 m
(2) Light point overhang	-7.688 m
(3) Boom inclination	30.0°
(4) Boom length	0.300 m
Annual operating hours	4000 h: 100.0 %, 20.0 W
Consumption	800.0 W/km
ULR / ULOR	0.02 / 0.00
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 978 cd/klm ≥ 80°: 835 cd/klm ≥ 90°: 90.6 cd/klm
Luminous intensity class 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

Lauku iela (no 1. mājas līdz 26A mājai)

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (M6)	L_{av}	0.30 cd/m²	≥ 0.30 cd/m²	✓
	U_o	0.87	≥ 0.35	✓
	U_l	0.89	≥ 0.40	✓
	TI	9 %	≤ 20 %	✓
	R_{EI}	0.98	≥ 0.30	✓

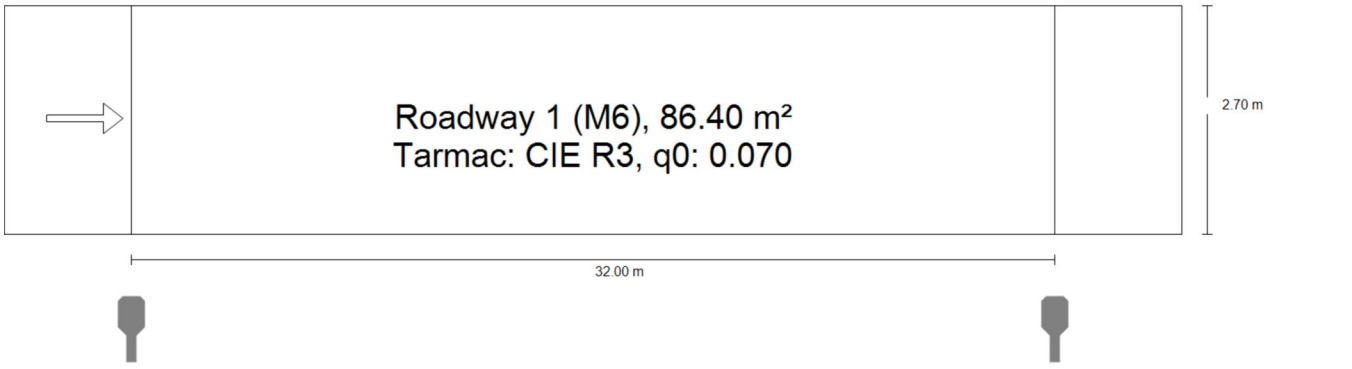
A maintenance factor of 0.80 was used for calculating for the installation.

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Lauku iela (no 1. mājas līdz 26A mājai)	D_p	0.049 W/lx*m²	-
SRU 020 740 L90 AA016_Bin-N8_TH (both sides offset)	D_e	1.1 kWh/m² yr,	160.0 kWh/yr

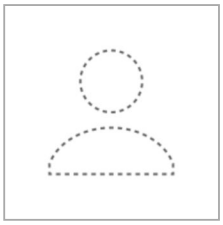
Oškalna (no 1 mājas līdz 18. mājai)

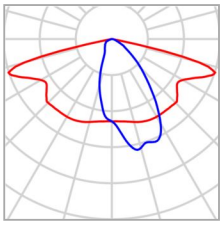
Summary (according to EN 13201:2015)



Oškalna (no 1 mājas līdz 18. mājai)

Summary (according to EN 13201:2015)

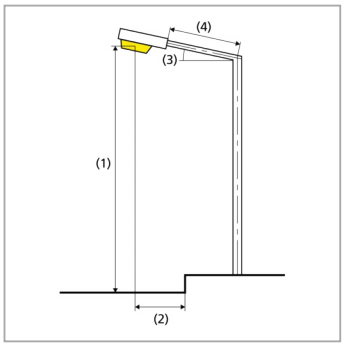




Manufacturer	Not yet a DIALux member
Article No.	Stork Little Sister 15 W 16 LEDs
Article name	SRU 015 740 L90 AA016_Bin-N8_TH
Fitting	1x 16 LEDs bin N8

P	15.0 W
Φ_{Lamp}	2194 lm
$\Phi_{Luminaire}$	2194 lm
η	100.00 %

SRU 015 740 L90 AA016_Bin-N8_TH (single side bottom)



Pole distance	32.000 m
(1) Light spot height	8.000 m
(2) Light point overhang	-0.990 m
(3) Boom inclination	15.0°
(4) Boom length	0.500 m
Annual operating hours	4000 h: 100.0 %, 15.0 W
Consumption	465.0 W/km
ULR / ULOR	0.00 / 0.00
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 976 cd/klm ≥ 80°: 375 cd/klm ≥ 90°: 12.3 cd/klm
Luminous intensity class 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

Oškalna (no 1 mājas līdz 18. mājai)

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (M6)	L_{av}	0.32 cd/m²	≥ 0.30 cd/m²	✓
	U_o	0.72	≥ 0.35	✓
	U_l	0.73	≥ 0.40	✓
	TI	9 %	≤ 20 %	✓
	R_{EI}	0.41	≥ 0.30	✓

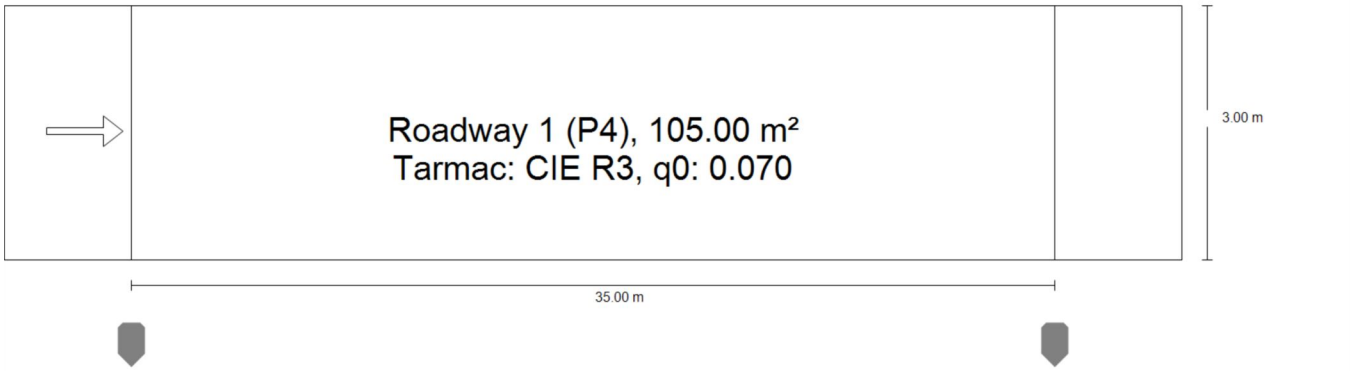
A maintenance factor of 0.80 was used for calculating for the installation.

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Oškalna (no 1 mājas līdz 18. mājai)	D_p	0.037 W/lx*m²	-
SRU 015 740 L90 AA016_Bin-N8_TH (single side bottom)	D_e	0.7 kWh/m² yr,	60.0 kWh/yr

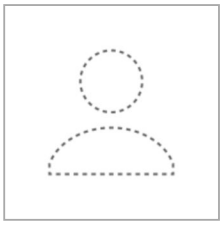
Rīgas iela 136 - Līvānu novada Centrālā bibliotēka

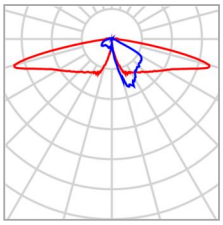
Summary (according to EN 13201:2015)



Rīgas iela 136 - Līvānu novada Centrālā bibliotēka

Summary (according to EN 13201:2015)

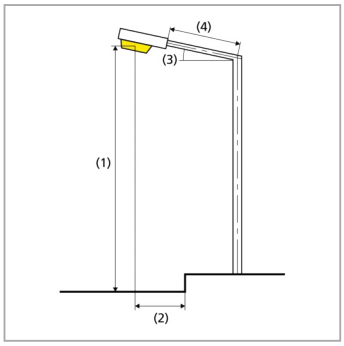




Manufacturer	Not yet a DIALux member
Article No.	Luscinia 15 W 24 LED
Article name	LU 015 740 V22 AF024
Fitting	1x 24 LED BIN N8 MOD AF

P	15.0 W
Φ_{Lamp}	2205 lm
$\Phi_{Luminaire}$	2205 lm
η	100.00 %

LU 015 740 V22 AF024 (single side bottom)



Pole distance	35.000 m
(1) Light spot height	4.000 m
(2) Light point overhang	-1.000 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 15.0 W
Consumption	435.0 W/km
ULR / ULOR	0.03 / 0.03
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 805 cd/klm ≥ 80°: 431 cd/klm ≥ 90°: 30.5 cd/klm
Luminous intensity class 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.3

Rīgas iela 136 - Līvānu novada Centrālā bibliotēka

Summary (according to EN 13201:2015)

Results for valuation fields

	Symbol	Calculated	Target	Check
Roadway 1 (P4)	E_{av}	5.92 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.32 lx	≥ 1.00 lx	✓

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

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Rīgas iela 136 - Līvānu novada Centrālā bibliotēka	D_p	0.024 W/lx*m²	-
LU 015 740 V22 AF024 (single side bottom)	D_e	0.6 kWh/m² yr,	60.0 kWh/yr