

public lighting system in Stefan Voda district, Talmaza village, Moldova

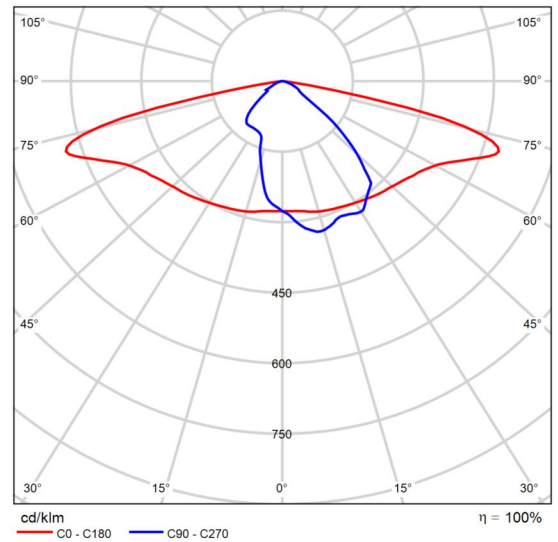


Product data sheet

Vizulo - Micro Martin 31 W 16 LED



Article No.	MRUE 031 740 BC5 BT016
P	31.0 W
Φ_{Lamp}	4737 lm
$\Phi_{Luminaire}$	4737 lm
η	100.00 %
Luminous efficacy	152.8 lm/W
CCT	4000 K
CRI	70



Polar LDC

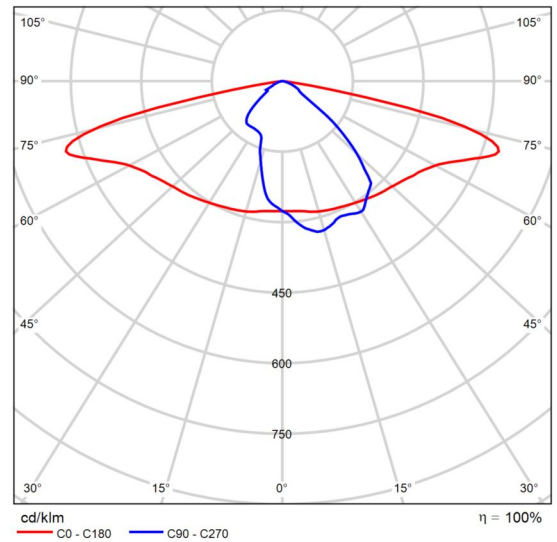


Product data sheet

Vizulo - Micro Martin 36 W 16 LED



Article No.	MRUE 036 740 BC5 BT016
P	36.0 W
Φ_{Lamp}	5408 lm
$\Phi_{Luminaire}$	5408 lm
η	100.00 %
Luminous efficacy	150.2 lm/W
CCT	4000 K
CRI	70



Polar LDC

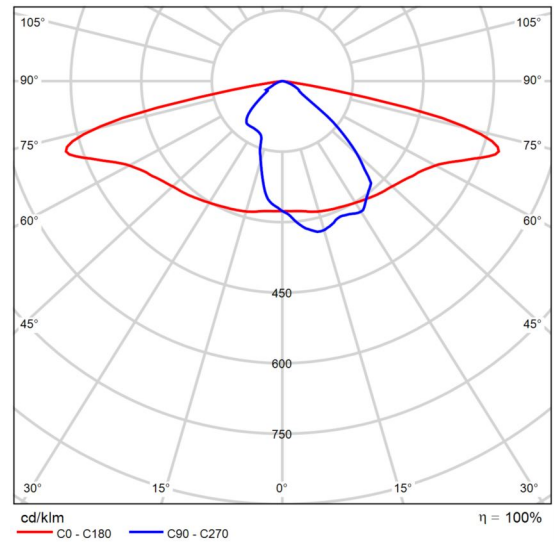


Product data sheet

Vizulo - Micro Martin 43 W 16 LED



Article No.	MRUE 043 740 BC5 BT016
P	43.0 W
Φ_{Lamp}	6302 lm
$\Phi_{Luminaire}$	6302 lm
η	100.00 %
Luminous efficacy	146.6 lm/W
CCT	4000 K
CRI	70



Polar LDC

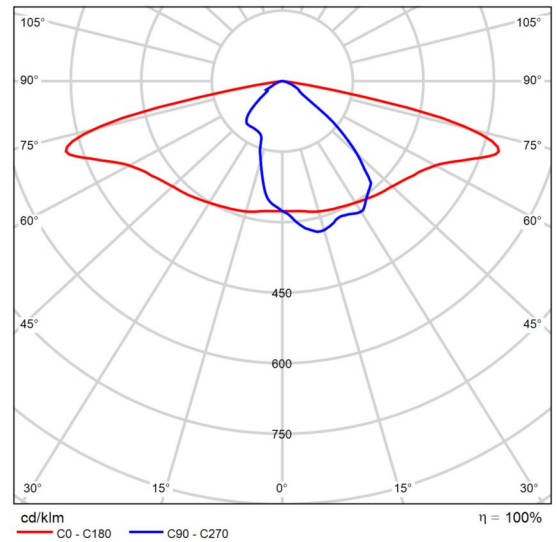


Product data sheet

Vizulo - Micro Martin 47 W 16 LED



Article No.	MRUE 047 740 BC5 BT016
P	47.0 W
Φ_{Lamp}	6590 lm
$\Phi_{Luminaire}$	6590 lm
η	100.00 %
Luminous efficacy	140.2 lm/W
CCT	4000 K
CRI	70

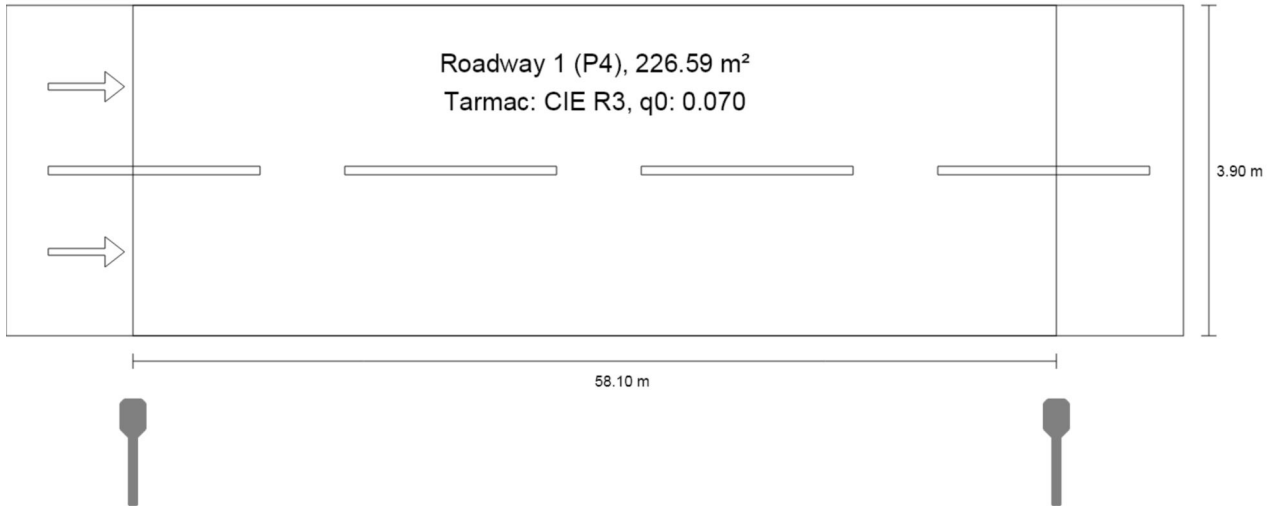


Polar LDC



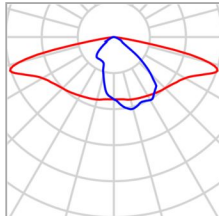
str. Biruinței

Summary (according to EN 13201:2015)



str. Biruinței

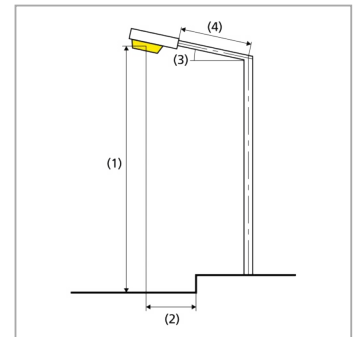
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	31.0 W
Article No.	MRUE 031 740 BC5 BT016	Φ_{Lamp}	4737 lm
Article name	Micro Martin 31 W 16 LED	$\Phi_{Luminaire}$	4737 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 31 W 16 LED (single side bottom)

Pole distance	58.100 m
(1) Light spot height	8.000 m
(2) Light point overhang	-1.000 m
(3) Boom inclination	0.0°
(4) Boom length	1.000 m
Annual operating hours	4000 h: 100.0 %, 31.0 W
Wattage / route	527.0 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.	$\geq 70^\circ$: 659 cd/klm $\geq 80^\circ$: 229 cd/klm $\geq 90^\circ$: 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.	-
Glare index class	D.5
MF	0.80





str. Biruinței

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 (P4)	E_{av}	5.37 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.12 lx	≥ 1.00 lx	✓

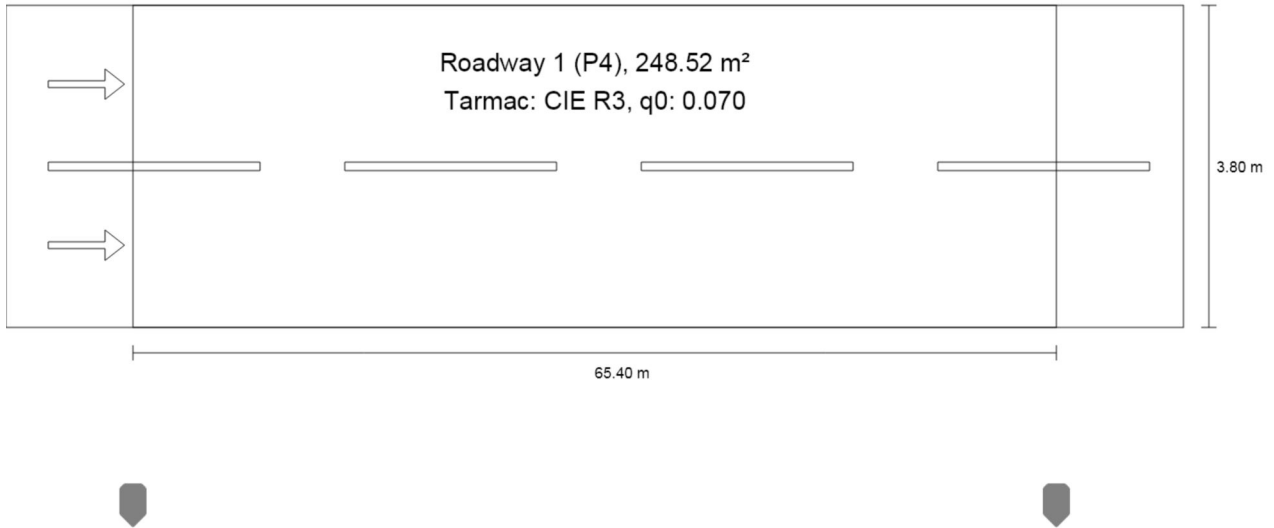
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. Biruinței	D_p	0.025 W/lx*m ²	–
Micro Martin 31 W 16 LED (single side bottom)	D_e	0.5 kWh/m ² yr	124.0 kWh/yr



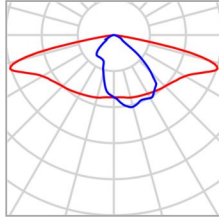
str. Duca Vodă №3

Summary (according to EN 13201:2015)



str. Duca Vodă №3

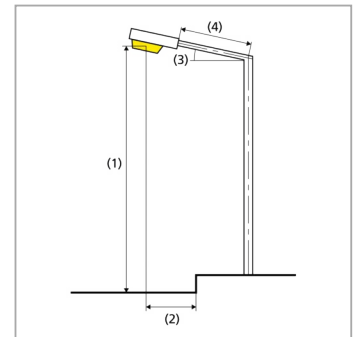
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	43.0 W
Article No.	MRUE 043 740 BC5 BT016	Φ_{Lamp}	6302 lm
Article name	Micro Martin 43 W 16 LED	$\Phi_{\text{Luminaire}}$	6302 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 43 W 16 LED (single side bottom)

Pole distance	65.400 m
(1) Light spot height	8.000 m
(2) Light point overhang	-2.100 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 43.0 W
Wattage / route	645.0 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.	$\geq 70^\circ$: 659 cd/klm $\geq 80^\circ$: 229 cd/klm $\geq 90^\circ$: 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.	-
Glare index class	D.5
MF	0.80





str. Duca Vodă №3

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 (P4)	E_{av}	5.95 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.02 lx	≥ 1.00 lx	✓

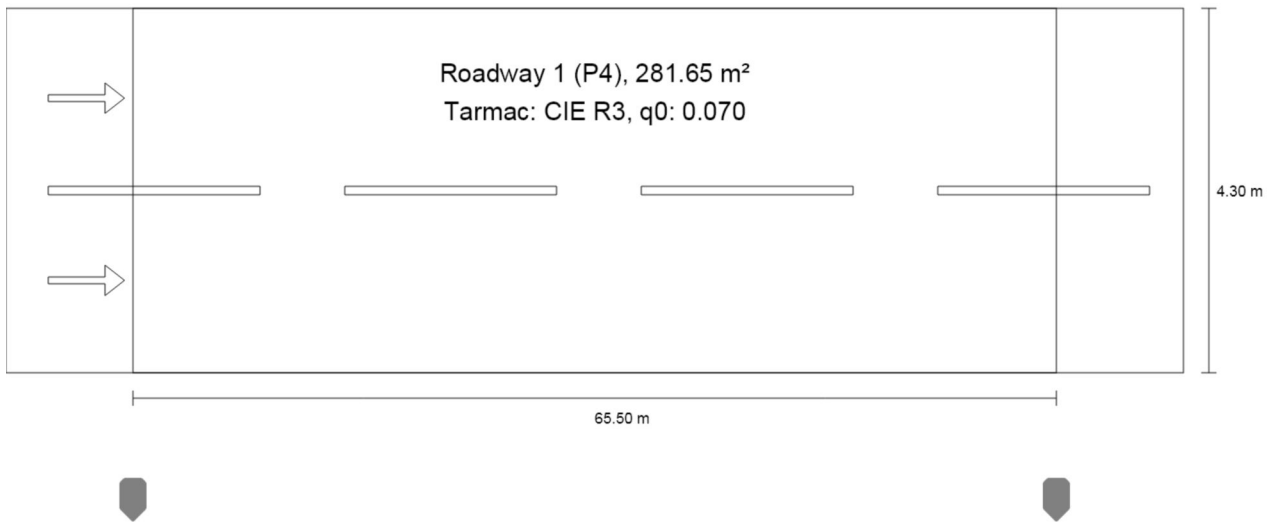
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. Duca Vodă №3	D_p	0.029 W/lx*m ²	–
Micro Martin 43 W 16 LED (single side bottom)	D_e	0.7 kWh/m ² yr	172.0 kWh/yr



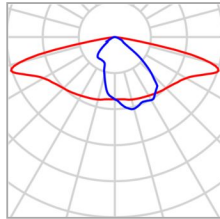
str. Duca Vodă №4

Summary (according to EN 13201:2015)



str. Duca Vodă №4

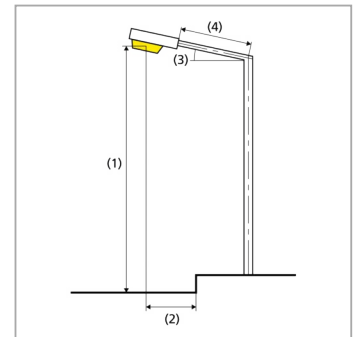
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	47.0 W
Article No.	MRUE 047 740 BC5 BT016	Φ_{Lamp}	6590 lm
Article name	Micro Martin 47 W 16 LED	$\Phi_{\text{Luminaire}}$	6590 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 47 W 16 LED (single side bottom)

Pole distance	65.500 m
(1) Light spot height	8.000 m
(2) Light point overhang	-1.500 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 47.0 W
Wattage / route	705.0 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.	$\geq 70^\circ$: 659 cd/klm $\geq 80^\circ$: 229 cd/klm $\geq 90^\circ$: 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.	-
Glare index class	D.5
MF	0.80





str. Duca Vodă №4

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 (P4)	E_{av}	6.35 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.02 lx	≥ 1.00 lx	✓

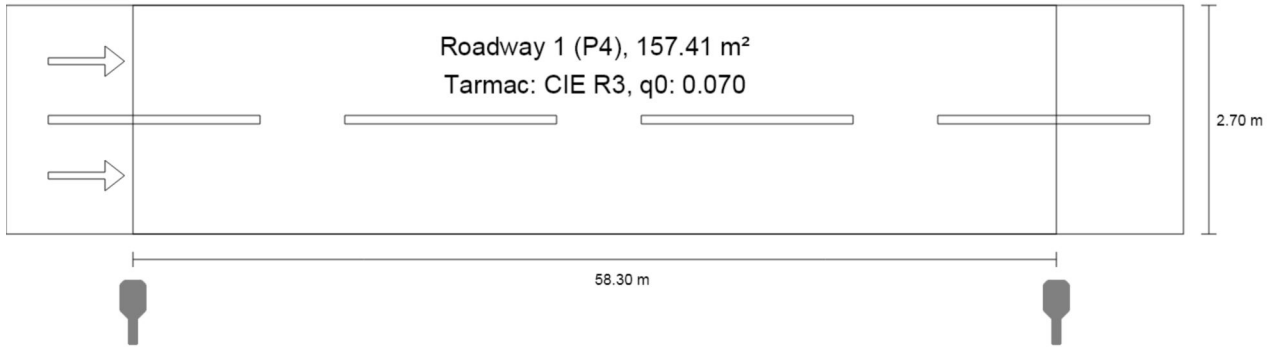
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. Duca Vodă №4	D_p	0.026 W/lx*m ²	–
Micro Martin 47 W 16 LED (single side bottom)	D_e	0.7 kWh/m ² yr	188.0 kWh/yr



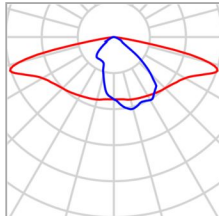
str. I. Soltis

Summary (according to EN 13201:2015)



str. I. Soltis

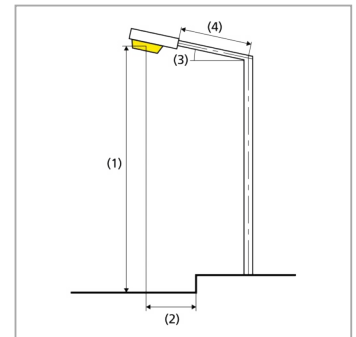
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	31.0 W
Article No.	MRUE 031 740 BC5 BT016	Φ_{Lamp}	4737 lm
Article name	Micro Martin 31 W 16 LED	$\Phi_{Luminaire}$	4737 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 31 W 16 LED (single side bottom)

Pole distance	58.300 m
(1) Light spot height	8.000 m
(2) Light point overhang	-0.800 m
(3) Boom inclination	0.0°
(4) Boom length	0.500 m
Annual operating hours	4000 h: 100.0 %, 31.0 W
Wattage / route	527.0 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.	$\geq 70^\circ$: 659 cd/klm $\geq 80^\circ$: 229 cd/klm $\geq 90^\circ$: 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.	-
Glare index class	D.5
MF	0.80





str. I. Soltîs

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 (P4)	E_{av}	5.54 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.08 lx	≥ 1.00 lx	✓

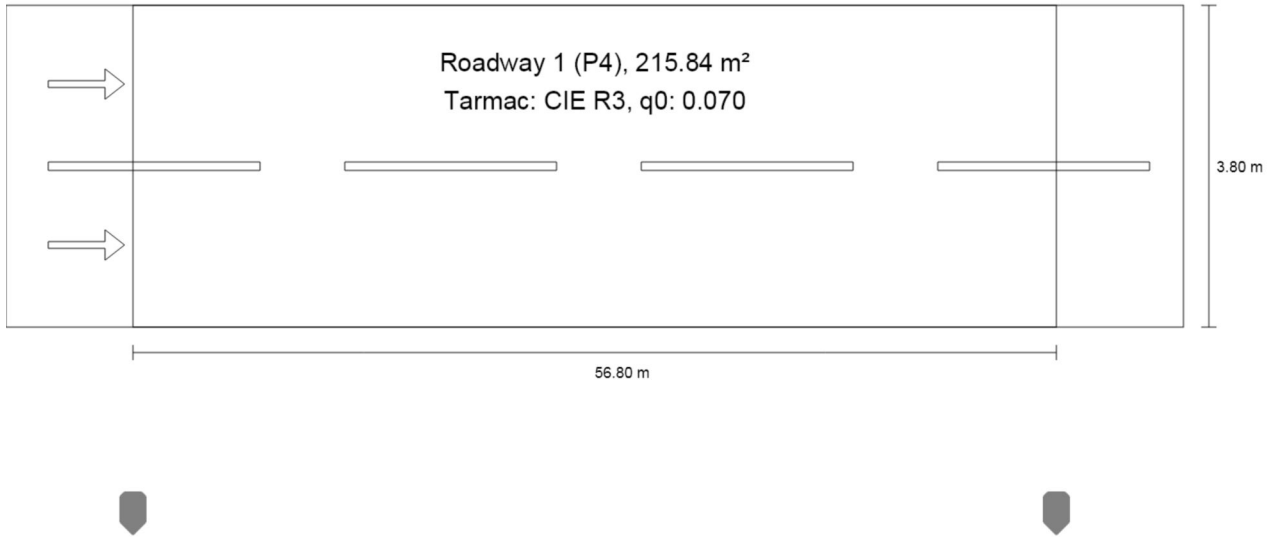
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. I. Soltîs	D_p	0.036 W/lx*m ²	–
Micro Martin 31 W 16 LED (single side bottom)	D_e	0.8 kWh/m ² yr	124.0 kWh/yr



str. Iu. Gagarin

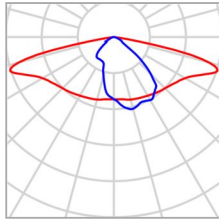
Summary (according to EN 13201:2015)





str. Iu. Gagarin

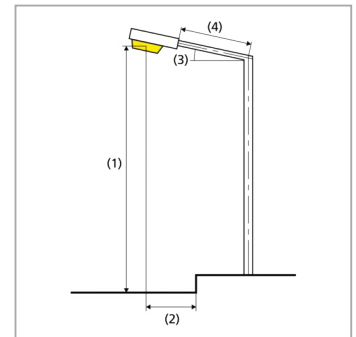
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	31.0 W
Article No.	MRUE 031 740 BC5 BT016	Φ_{Lamp}	4737 lm
Article name	Micro Martin 31 W 16 LED	$\Phi_{Luminaire}$	4737 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 31 W 16 LED (single side bottom)

Pole distance	56.800 m
(1) Light spot height	8.000 m
(2) Light point overhang	-2.200 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 31.0 W
Wattage / route	558.0 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.	$\geq 70^\circ$: 659 cd/klm $\geq 80^\circ$: 229 cd/klm $\geq 90^\circ$: 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.	-
Glare index class	D.5
MF	0.80





str. Iu. Gagarin

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 (P4)	E_{av}	5.10 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.29 lx	≥ 1.00 lx	✓

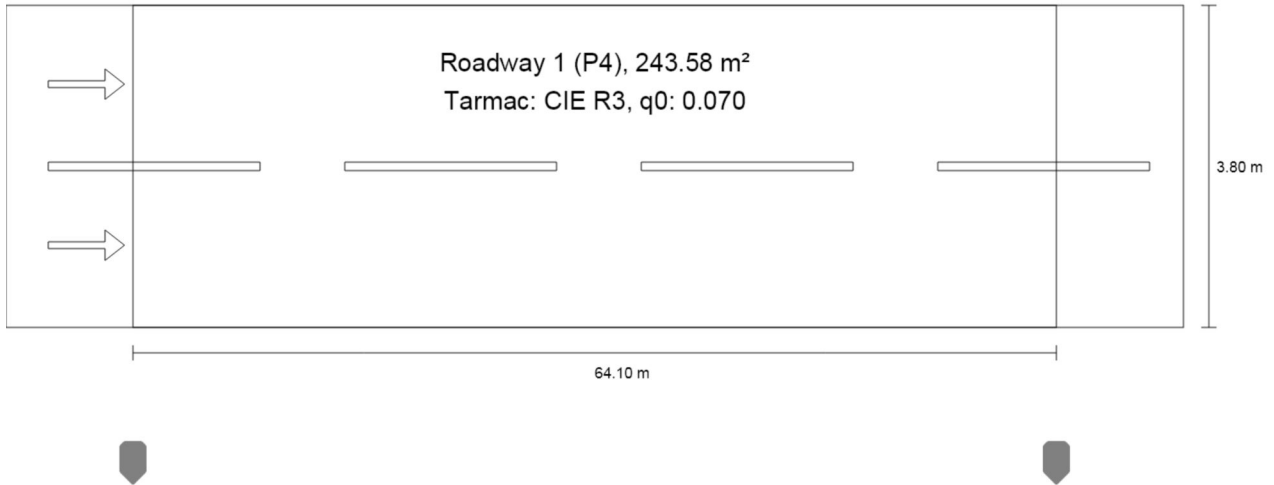
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. Iu. Gagarin	D_p	0.028 W/lx*m ²	–
Micro Martin 31 W 16 LED (single side bottom)	D_e	0.6 kWh/m ² yr	124.0 kWh/yr



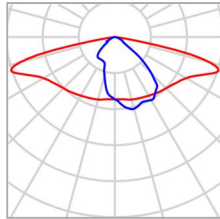
str. M. Eminescu №3

Summary (according to EN 13201:2015)



str. M. Eminescu №3

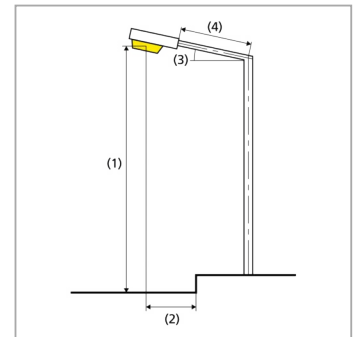
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	43.0 W
Article No.	MRUE 043 740 BC5 BT016	Φ_{Lamp}	6302 lm
Article name	Micro Martin 43 W 16 LED	$\Phi_{Luminaire}$	6302 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 43 W 16 LED (single side bottom)

Pole distance	64.100 m
(1) Light spot height	9.000 m
(2) Light point overhang	-1.600 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 43.0 W
Wattage / route	688.0 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°: 659 cd/klm ≥ 80°: 229 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.	-
Glare index class	D.5
MF	0.80





str. M. Eminescu №3

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 (P4)	E_{av}	5.75 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.29 lx	≥ 1.00 lx	✓

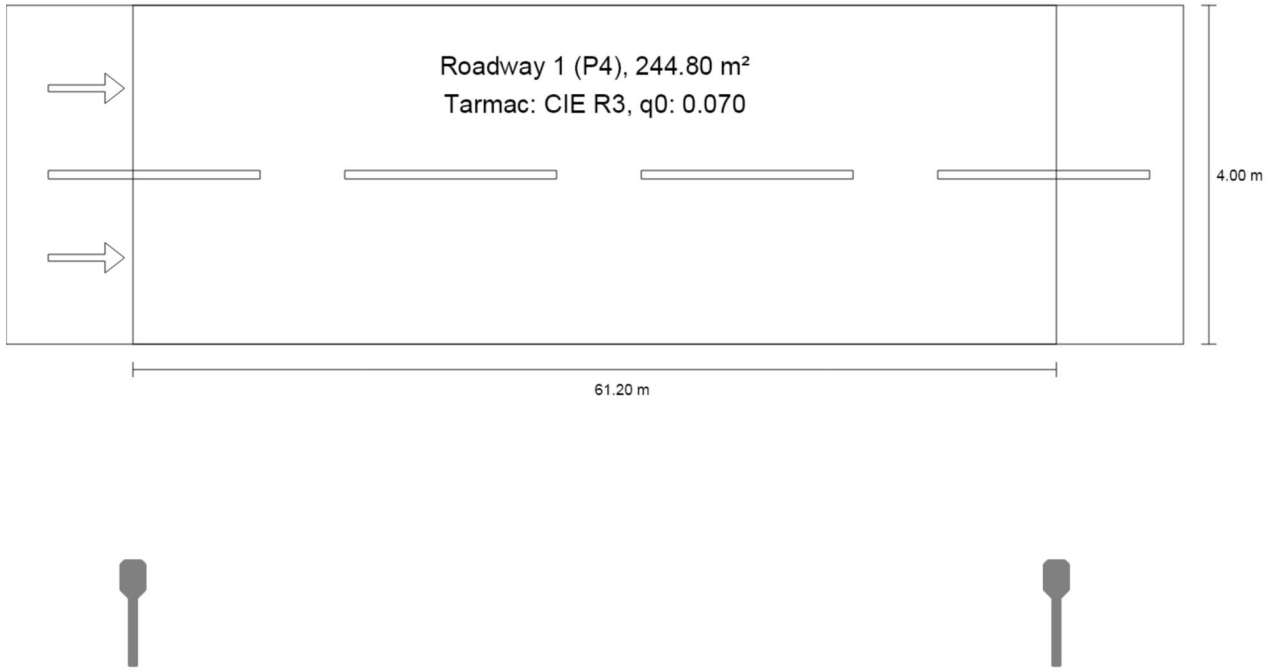
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. M. Eminescu №3	D_p	0.031 W/lx*m ²	–
Micro Martin 43 W 16 LED (single side bottom)	D_e	0.7 kWh/m ² yr	172.0 kWh/yr



str. M. Eminescu №4

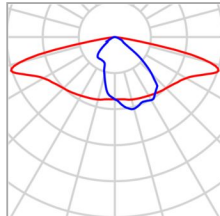
Summary (according to EN 13201:2015)





str. M. Eminescu №4

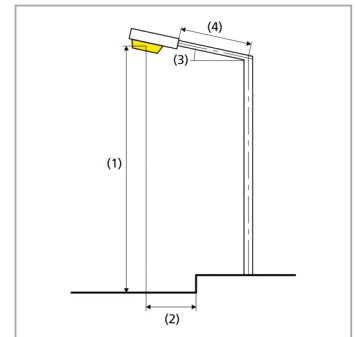
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	36.0 W
Article No.	MRUE 036 740 BC5 BT016	Φ_{Lamp}	5408 lm
Article name	Micro Martin 36 W 16 LED	$\Phi_{Luminaire}$	5408 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 36 W 16 LED (single side bottom)

Pole distance	61.200 m
(1) Light spot height	8.000 m
(2) Light point overhang	-2.795 m
(3) Boom inclination	5.0°
(4) Boom length	1.000 m
Annual operating hours	4000 h: 100.0 %, 36.0 W
Wattage / route	576.0 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°: 655 cd/klm ≥ 80°: 356 cd/klm ≥ 90°: 1.46 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.5
MF	0.80





str. M. Eminescu №4

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 (P4)	E_{av}	5.04 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.14 lx	≥ 1.00 lx	✓

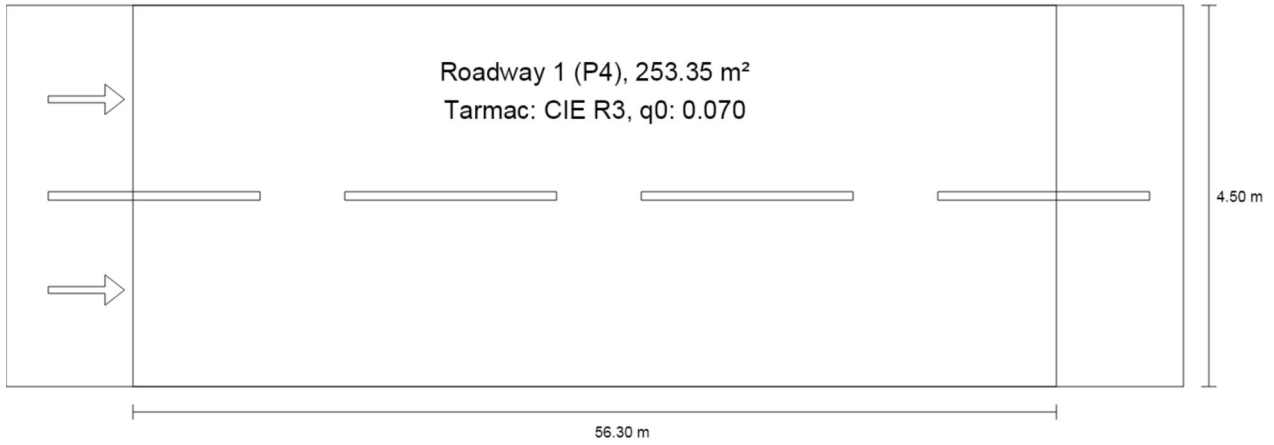
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. M. Eminescu №4	D_p	0.029 W/lx*m ²	–
Micro Martin 36 W 16 LED (single side bottom)	D_e	0.6 kWh/m ² yr	144.0 kWh/yr



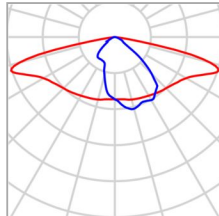
str. Stefan Vodă

Summary (according to EN 13201:2015)



str. Stefan Vodă

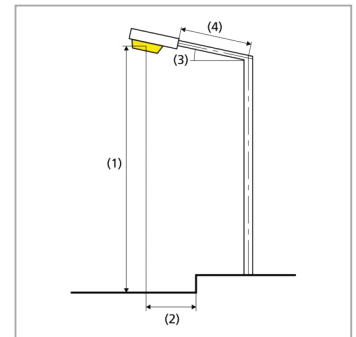
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	36.0 W
Article No.	MRUE 036 740 BC5 BT016	Φ_{Lamp}	5408 lm
Article name	Micro Martin 36 W 16 LED	$\Phi_{Luminaire}$	5408 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 36 W 16 LED (single side bottom)

Pole distance	56.300 m
(1) Light spot height	8.000 m
(2) Light point overhang	-3.295 m
(3) Boom inclination	5.0°
(4) Boom length	1.000 m
Annual operating hours	4000 h: 100.0 %, 36.0 W
Wattage / route	648.0 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°: 655 cd/klm ≥ 80°: 356 cd/klm ≥ 90°: 1.46 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.5
MF	0.80





str. Stefan Vodă

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 (P4)	E_{av}	5.03 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.54 lx	≥ 1.00 lx	✓

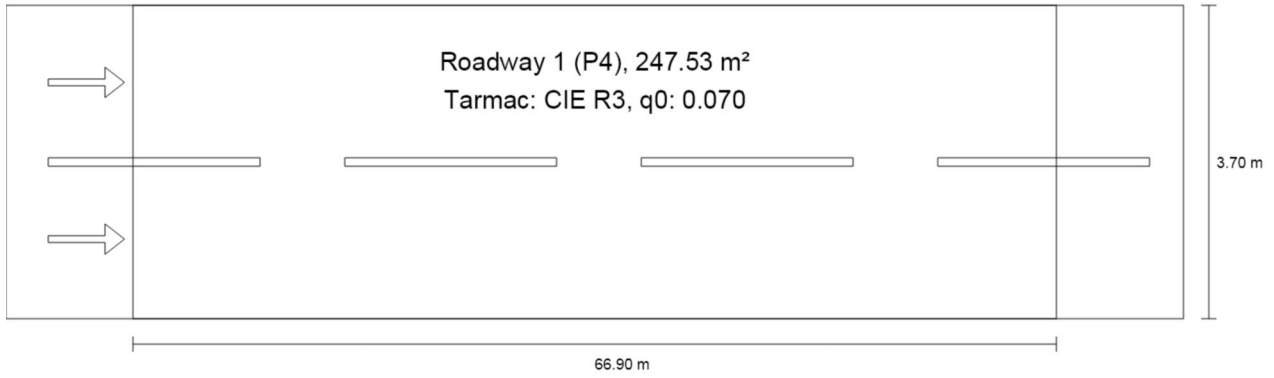
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. Stefan Vodă	D_p	0.028 W/lx*m ²	–
Micro Martin 36 W 16 LED (single side bottom)	D_e	0.6 kWh/m ² yr	144.0 kWh/yr



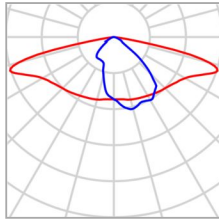
str. Suvorov №3

Summary (according to EN 13201:2015)



str. Suvorov №3

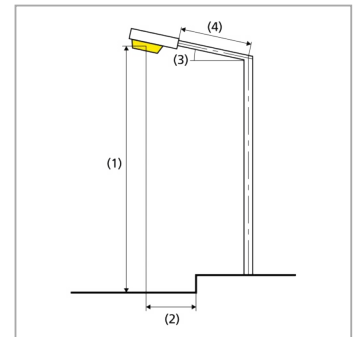
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	47.0 W
Article No.	MRUE 047 740 BC5 BT016	Φ_{Lamp}	6590 lm
Article name	Micro Martin 47 W 16 LED	$\Phi_{Luminaire}$	6590 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 47 W 16 LED (single side bottom)

Pole distance	66.900 m
(1) Light spot height	8.000 m
(2) Light point overhang	-3.092 m
(3) Boom inclination	5.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 47.0 W
Wattage / route	705.0 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°: 655 cd/klm ≥ 80°: 356 cd/klm ≥ 90°: 1.46 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.5
MF	0.80





str. Suvorov №3

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 (P4)	E_{av}	5.54 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.01 lx	≥ 1.00 lx	✓

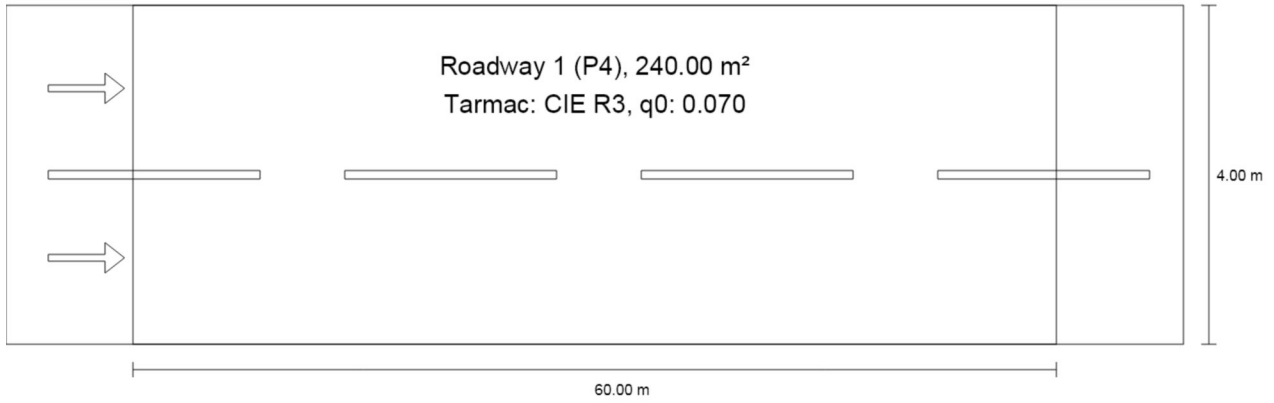
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. Suvorov №3	D_p	0.034 W/lx*m ²	–
Micro Martin 47 W 16 LED (single side bottom)	D_e	0.8 kWh/m ² yr	188.0 kWh/yr



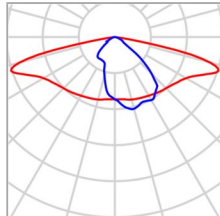
str. Suvorov №4

Summary (according to EN 13201:2015)



str. Suvorov №4

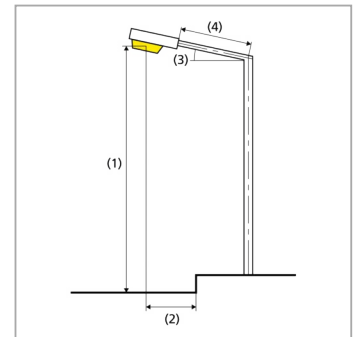
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	43.0 W
Article No.	MRUE 043 740 BC5 BT016	Φ_{Lamp}	6302 lm
Article name	Micro Martin 43 W 16 LED	$\Phi_{\text{Luminaire}}$	6302 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 43 W 16 LED (single side bottom)

Pole distance	60.000 m
(1) Light spot height	8.000 m
(2) Light point overhang	-3.800 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 43.0 W
Wattage / route	731.0 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.	$\geq 70^\circ$: 659 cd/klm $\geq 80^\circ$: 229 cd/klm $\geq 90^\circ$: 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.	-
Glare index class	D.5
MF	0.80





str. Suvorov №4

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 (P4)	E_{av}	5.15 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.36 lx	≥ 1.00 lx	✓

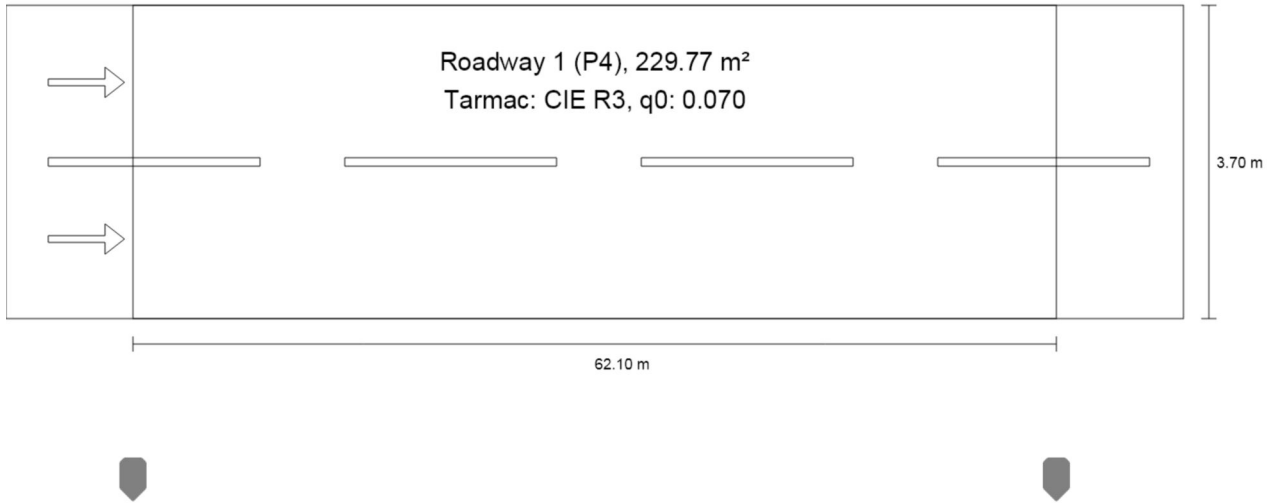
Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. Suvorov №4	D_p	0.035 W/lx*m ²	–
Micro Martin 43 W 16 LED (single side bottom)	D_e	0.7 kWh/m ² yr	172.0 kWh/yr



str. V. Lupu

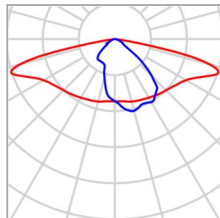
Summary (according to EN 13201:2015)





str. V. Lupu

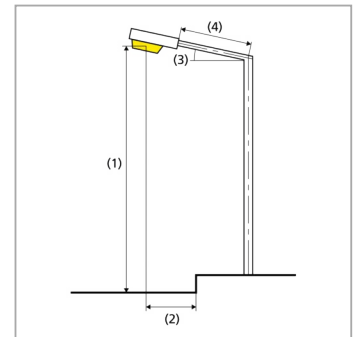
Summary (according to EN 13201:2015)



Manufacturer	Vizulo	P	36.0 W
Article No.	MRUE 036 740 BC5 BT016	Φ_{Lamp}	5408 lm
Article name	Micro Martin 36 W 16 LED	$\Phi_{Luminaire}$	5408 lm
Fitting	1x 16 LED MOD BT	η	100.00 %

Micro Martin 36 W 16 LED (single side bottom)

Pole distance	62.100 m
(1) Light spot height	8.000 m
(2) Light point overhang	-1.900 m
(3) Boom inclination	0.0°
(4) Boom length	0.000 m
Annual operating hours	4000 h: 100.0 %, 36.0 W
Wattage / route	576.0 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°: 659 cd/klm ≥ 80°: 229 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.	-
Glare index class	D.5
MF	0.80





str. V. Lupu

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 (P4)	E_{av}	5.49 lx	[5.00 - 7.50] lx	✓
	E_{min}	1.04 lx	≥ 1.00 lx	✓

Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
str. V. Lupu	D_p	0.029 W/lx*m ²	–
Micro Martin 36 W 16 LED (single side bottom)	D_e	0.6 kWh/m ² yr	144.0 kWh/yr