


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Investor:	Město Kostelec nad Orlicí					
Akce: Rekonstrukce ulice Pivoňkova Kostelec nad Orlicí			Zakázkové číslo:		033/2016	Paré:
			Datum:		12/2016	
			Formát:		-	
Objekt: C.2 SO 401 Veřejné osvětlení			Stupeň:		DSP+PDPS	
Obsah: Výpočet osvětlení			Měřítko:		-	Číslo výkresu: <b>C.2.5</b>

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## Kostelec nad Orlicí

výpočet VO v ulici Pivoňkova

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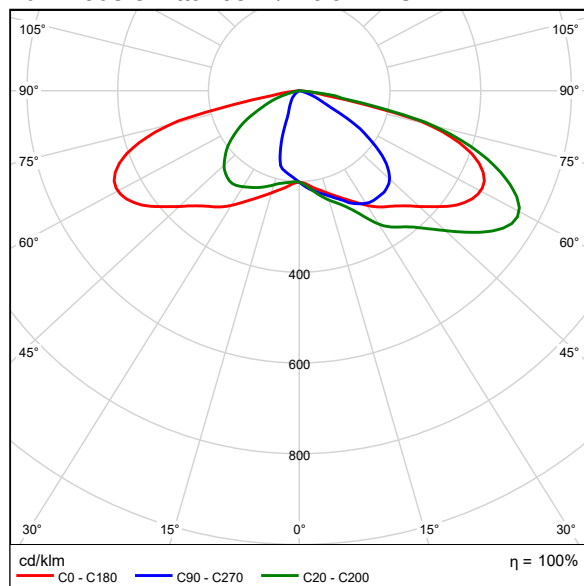
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## iGuzzini illuminazione 0\_BU71 Wow 28,5W 1xLED



Light output ratio: 100%  
 Luminaire luminous flux: 2870 lm  
 Power: 28.5 W  
 Luminous efficacy: 100.7 lm/W

## Luminous emittance 1 / Polar LDC



## BU71 :

Outdoor luminaire with direct light street optic for a high level of visual comfort (G4), designed to use LED lamps. Optical assembly made of die-cast aluminium, with dual phosphorous – chromium plating of the base metal, passivation at 120°C, RAL 9007 grey liquid paint, curing at 150° C; possibility of adjusting, also with a graduated scale, the angle relative to the road surface by +15°/-10° (in 5° steps) in the pole-top installation and +5°/-20° (in 5° steps) in the lateral installation. 5 mm thick sodium-calcium closing glass. The glass secured to the frame closes the LED optical assembly which is fixed to the components assembly with a hinge and 2 screws. The high IP rating is guaranteed by the silicone gasket placed between the two elements. Complete with circuit having Warm White monochrome LEDs and silver aluminium reflectors. LED assembly can be replaced directly on site. Possibility of replacing the LEDs in groups of 12 in the laboratory. Driver with automatic inner temperature control system. Driver with 4 different operating profiles, without the aid of external controls, fixed profiles (1\_2\_3) at 100% corresponding to three different lumen outputs and profile (4) with midnight point recognition and lumen output related to profile 1. Profiles can be selected using microswitches (operating cycles can be customised using dedicated software and a dedicated USB interface). Dali and 0\_10V versions available upon request. Replaceable power supply. The optical assembly is fixed to the wall-mounted or pole-top attachment with two clamping screws and two safety grub screws facilitate assembly. The luminous flux emitted in the upper hemisphere of the System in the horizontal position is null (in conformity with the strictest standards for the prevention of light pollution). All external screws are made of stainless steel.

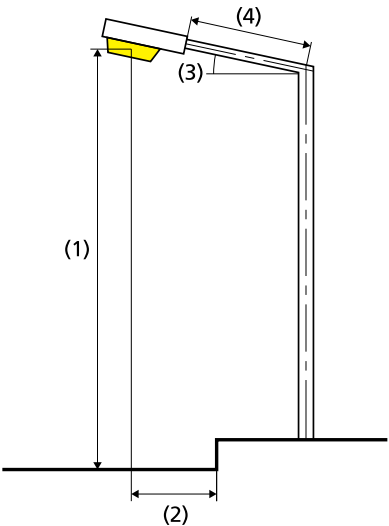
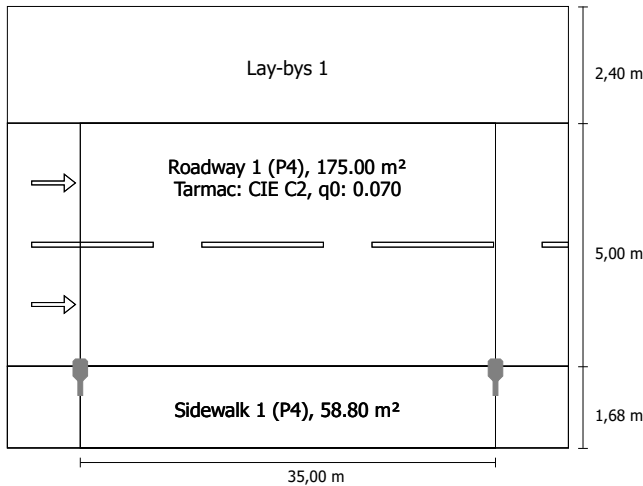
## 0 - Rotation of the sleeve

BU71.015 - Pole-mounted system - 620x3075mm optical assembly - Warm White - ST1 street optic - 28,5W 2870lm (Profile 1-4) - 41,6W 4010lm (Profile 2) - 59,7W 5430lm (Profile 3) - 3000K - Grey  
 LW36 - Lamp Profile 01-04

Order No.: 4

Pivoňkova according to EN 13201:2015

iGuzzini illuminazione 0\_BU71 Wow 28,5W  
1xLED



Results for valuation fields  
Maintenance factor: 0.81

Roadway 1 (P4)

Em [lx] ≥ 5.00 ≤ 7.50	Emin [lx] ≥ 1.00	TI [%]
✓ 6.52	✓ 1.85	* 16

Sidewalk 1 (P4)

Em [lx] ≥ 5.00 ≤ 7.50	Emin [lx] ≥ 1.00
✓ 5.94	✓ 1.42

\* Informative, not part of the valuation

Results for energy efficiency indicators

Power density indicator (Dp)	0.019 W/lxm²
Energy consumption density	
Arrangement: Wow 28,5W (114.0 kWh)	0.5 kWh/m² p.a.

Luminous flux (luminaire):	2869.97 lm
Luminous flux (lamp):	2870.00 lm
Operating Hours	
4000 h:	100.0 %, 28.5 W
W/km:	826.5
Arrangement:	single side bottom
Pole distance:	35.000 m
Boom inclination (3):	0.0°
Boom length (4):	0.000 m
Light centre height (1):	6.000 m
Light overhang (2):	-0.100 m

ULR:	0.00
ULOR:	0.00
Maximum luminous intensities	
at 70°:	487 cd/klm
at 80°:	96.0 cd/klm
at 90°:	0.00 cd/klm
Luminous intensity class:	G*4
Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	
Arrangement complies with glare index class D.5	

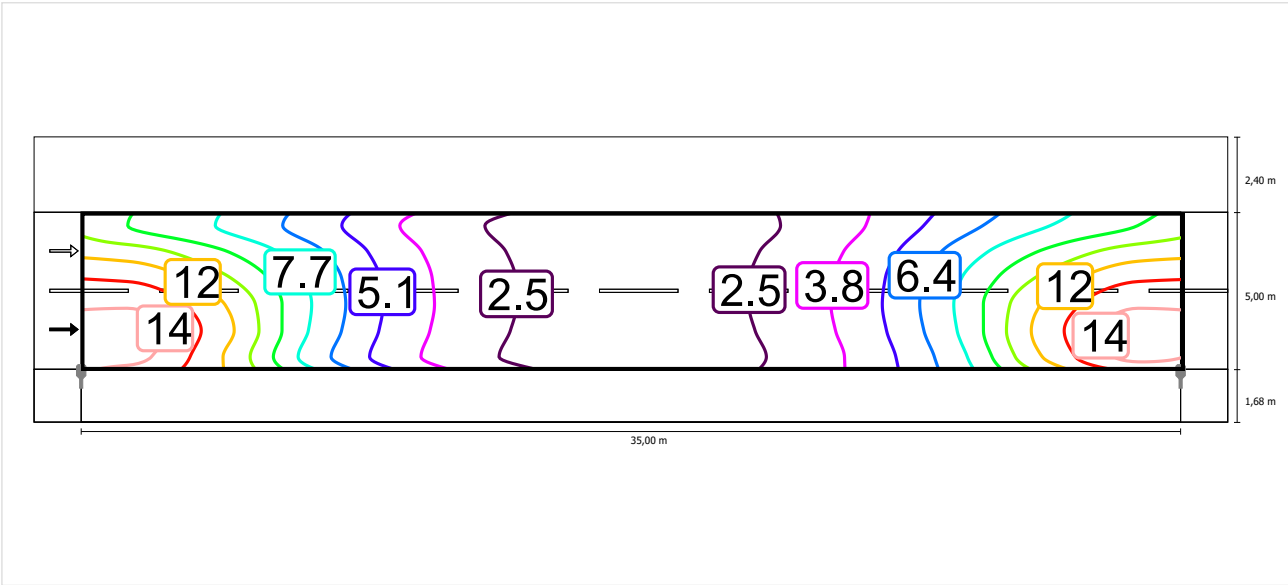
Roadway 1 (P4)

Maintenance factor: 0.81  
Grid: 12 x 6 Points

Em [lx] ≥ 5.00 ≤ 7.50	Emin [lx] ≥ 1.00	TI [%]
✓ 6.52	✓ 1.85	* 16

\* Informative, not part of the valuation

Horizontal illuminance



Scale: 1 : 500

Observer 1

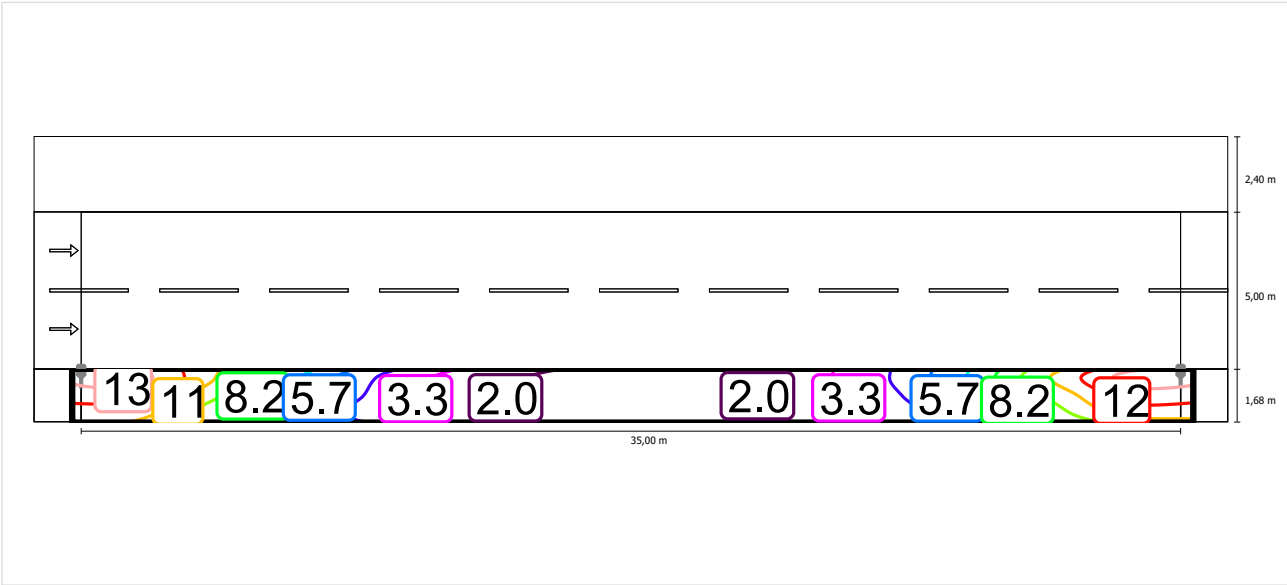
Observer 2

Sidewalk 1 (P4)

Maintenance factor: 0.81  
Grid: 12 x 3 Points

Em [lx]	Emin [lx]
≥ 5.00	≥ 1.00
≤ 7.50	
✓ 5.94	✓ 1.42

Horizontal illuminance



Scale: 1 : 500