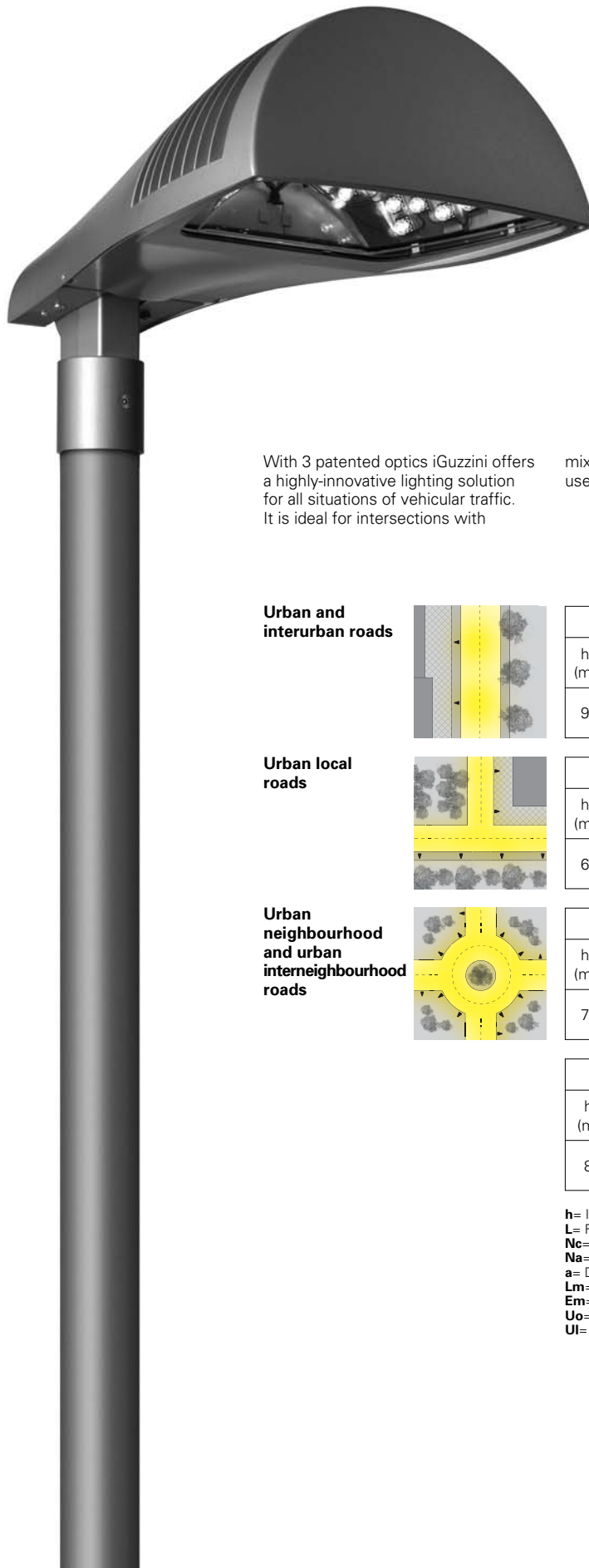




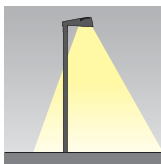
A high level design for a latest-generation LED luminaire. The innovative optics and "intelligent" electronics meet the most diverse street lighting requirements. The technology has been studied to achieve maximum energy saving and minimum environmental impact (up to 464,000 kW h and 195,000 kg CO₂ for 1,000 luminaires a year) along with excellent visual comfort. Archilede allows a dramatic reduction of running costs in public lighting installations, with the same lighting performance as traditional light sources, effectively contributing to policies for the reduction of light pollution.



With 3 patented optics iGuzzini offers a highly-innovative lighting solution for all situations of vehicular traffic. It is ideal for intersections with

mixed traffic flows, and different users, such as bikers, pedestrians, etc.).

No upward emission of light flow



Universal adapter for poles (from ø 46 to 76)



Adjustability ± 20°



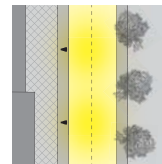
Self learning driver



Terminal block with fuse

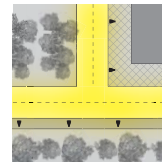


Urban and interurban roads



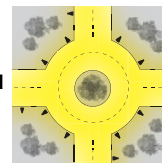
106 W 84 LED						
h (m)	L (m)	Nc	a (m)	Lm	Uo	UI
9	8	2	33,5	1	0,4	0,6

Urban local roads



57 W 39 LED						
h (m)	L (m)	Nc	a (m)	Lm	Uo	UI
6	6	2	23	0,75	0,4	0,6

Urban neighbourhood and urban interneighbourhood roads



77 W 59 LED (roads)						
h (m)	L (m)	Nc	a (m)	Lm	Uo	UI
7	7	2	26	1	0,4	0,5

57 W 39 LED (round)						
h (m)	L (m)	Nc	Na	Em	Uo	
8	7	2	8	20	0,5	

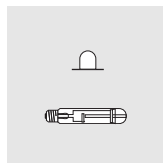
h= Installation height
L= Road width
Nc= Number of lanes
Na= Number of luminaires
a= Distance between poles
Lm= Average luminance in cd/m²
Em= Average lighting in lx
Uo= Average uniformity
UI= Longitudinal uniformity



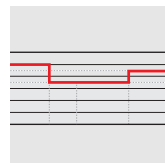
Comparison of maintenance cycles for: LED, HST, HME.

Light source	Lamp life	Maintenance cycles
LED	65.000 h (B20 L80) 100.000 h (B20 L75)	1 / 14,8 years 1 / 22,8 years
Sodium HST	15.000 h	1 / 3,5 years
Mercury HME	8.000 h	1 / 1,8 years

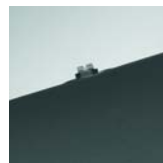
- 4380 h/year of operation
- 12 h/day
- LED average life at Ta=25°C 65.000 h (B20 L80)
- LED average life at Ta=25°C 100.000 h (B20 L75)
- B20 L80: 80% of LEDs maintain 80% of the initial flux after 65.000h
- B20 L75 80% of LEDs maintain 75% of the initial flux after 100.000h



LED technology vs. sodium technology



Ballast with multiple operation modes



Twilight photocell



Colour rendering index ≥60



Energy saving and reduction of CO₂ emission in atmosphere for 1000 luminaires in one year

The contribution to climatic protection of 1000 luminaires with 84 LEDs corresponds to the work of 6623 trees in one year to absorb the higher CO₂ emission of a public lighting system with traditional sodium lamps.

Light source	System wattage	Energy/year for 1,000 luminaires	CO ₂ emitted in the atmosphere
84 LED	106 W	464.280 KWh	195.000 Kg CO ₂
150 W HST	178 W	779.640 KWh	327.450 Kg CO ₂

The number in the "CO₂ Absorption" symbol corresponds to the number of trees that would be necessary to absorb the amount of saved CO₂ if it was introduced in the atmosphere.



59 LED	76 W	332.880 KWh	139.810 Kg CO ₂
100 W HST	120 W	525.600 KWh	220.750 Kg CO ₂



- 4380 h/year of operation
- 12 h/day
- LED average life at Ta=25°C 60,000h (B20L80); >100,000h (B20L70)
- B20L80: 80% of LEDs maintain 80% of the initial flux after 65,000 h
- B20L70: 80% of LEDs maintain 70% of the initial flux after 100.000 h

39 LED	57 W	249.660 KWh	104.860 Kg CO ₂
70 W HST	93 W	407.340 KWh	171.082 Kg CO ₂

