

# SM90 LED STREET LIGHT

WORLDWIDE POWERED

ACTIVE POWER FACTOR CORRECTION (PFC)

ADAPTIVE ROTATION INSTALLATION FRAME, RETROFIT WISE

LEDs – 160 LM/W

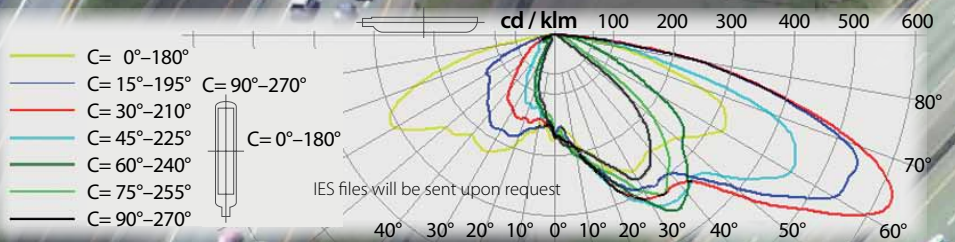
EXTREMELY WIDE ASYMMETRIC LENSES

ZERO LIGHT POLLUTION

AUTOMATIC ECONOMY LATE NIGHT DIMMING \*

## SM90

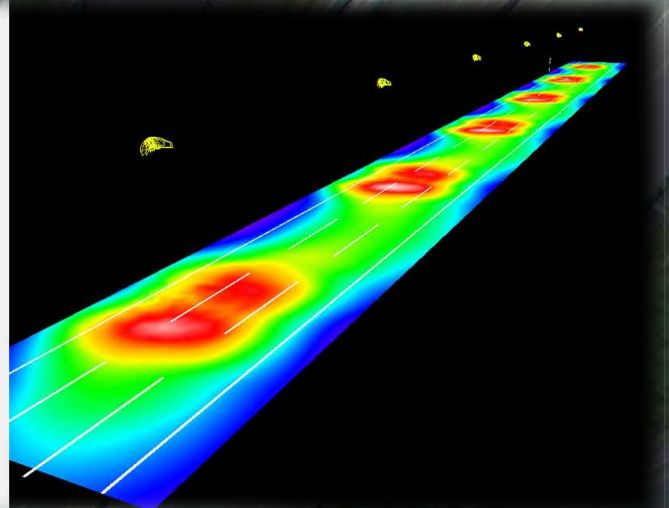
- HIGH ENERGY EFFICIENCY
- NO MAINTENANCE COSTS
- LONG LIFECYCLE
- HIGH QUALITY AREA ILLUMINATION
- ERGONOMICAL – CLOSE TO NATURAL LIGHT
- ECOLOGICAL – MERCURY AND LEAD FREE



### False Colours

illuminances

	20.00 lx
	17.50 lx
	15.00 lx
	12.50 lx
	10.00 lx
	7.50 lx
	5.00 lx
	2.50 lx
	0.00 lx



# SM90



## SPECIFICATIONS

AC Input Voltage	90 ÷ 305 V AC
DC Input Voltage	127 ÷ 431 V DC
Mains Frequency	47 ÷ 63 Hz
Power Factor (PF) at 230 V	min 95 %
Power Factor (PF) at 115 V	min 98 %
LED Power	87.1 W
Power Efficiency	89 %
Total Power	97.5 W
Average power in late night dimming mode*	69.1 W
LED Light Output	160 lm/W
Current Efficiency	80 %
LED Luminous Flux	11 216 lm
Junction Temperature at Ta = 25°C	70°C
Thermal Efficiency	91 %
Lens Efficiency	92 %
Real Luminaire Efficacy (LER)	96 lm/W
Color Rendering Index (CRI)	65 ÷ 80
Real Lamp Luminous Flux for:	
Cool White (CRI 65)	9 390 lm
Neutral White (CRI 75)	8 710 lm
Warm White (CRI 80)	7 370 lm
Zero Light Pollution	0 cd at 90°
Operating Temperature	-40° ÷ +45°C
Operating Humidity	10 ÷ 95 % RH
Lifespan L70	> 160 000 h
Ingress protection rating	IP 65
Electrical Safety Class	Class II
Polycarbonate optical cover	optional

## MECHANICAL CONSTRUCTION

Marine Grade Aluminium Alloy Body	
Stainless Steel Rotation Mechanism	115° (-90° ÷ +15°)
Installation Diameter	ø 42 ÷ ø 76 mm
Dimensions	750 x 180 x 80 mm
Weight	5.5 kg

## Additional deliveries

- Zinc plated metal poles
- Means of fixing the pole underground / fundament

\* Late night dimming:  
 50 % illuminance decreasing after 4 hours till 1 h before dawn;  
 Optional illuminance decreasing – 20 ÷ 90 %;  
 Optional dimming start – 2 ÷ 8 hours;  
 Optional dimming stop – 0.5 ÷ 3 h before dawn.

## SM90 Application According EU Standards

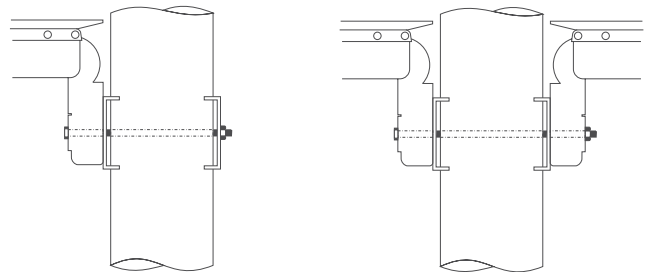
3 lanes x 3.5 m ME4a streets L = 33 m; H = 9.5 m; Oh = 0.5 m or b = 5°  
 (more than 60 km/h)

3 lanes x 3.5 m ME5 streets L = 50 m; H = 9 m  
 (less than 60 km/h)

## SM90 Application According US Standards

3 lanes x 3.5 m streets L = 40 m; H = 9 m

- L – Distance between the light sources (poles)
- H – Height of the light source above the ground
- Oh – Luminaire Overhang arm
- b – Luminaire tilt angle



Optional kit for mounting one or two lamps sideways to the pole ø 70 ÷ 200 mm

C E EN61000-6-3:1997, EN61000-6-1:1997  
 Quality Assurance ISO 9001:2008; AQAP 2110