

**tvzs**



**tec**

# EXL LAMPS

# STANDARDS



**ENERGY  
SAVING**



Replaced by



- 10** tentfold brightness
- 10** tentfold lifetime
- 20** twenty percent energy consumption

Incandescent Lamps

EXL LAMP

## EXL LAMP'S BENEFITS

### 1. High luminous efficiency

EXL lamps efficiently achieve 140LM / W equivalent to ceramic metal lamp and two times higher than ordinary metal halide lamps.

### 2. High colour rendering

EXL lamps give full spectrum light that is close to daylight with a CRI ( colour rendering index ) of up to 94. EXL gives more clear and natural-looking light than the old mercury-vapour and sodium-vapour lamps. It provides noticeable stability and consistency in lamp-to-lamp colour, initially and throughout life.

### 3. Long Life

Up to 20,000 hrs life, which is approx 2 times longer than ordinary metal halide lamps.

### 4. EXLs turn on instantly

Shorter cold and hot start-up time than ordinary metal halide lamps and CDM lamps.

### 5. Low energy consumption, save money on electricity

Energy saving, up to 80% less energy consumption than most conventional lighting products. With less thermal radiation, running costs are reduced.

### 6. Cost effective replacement

With replacement costs every 3 or more years, low electrical bills and an affordable purchase price. EXL lamps have become the common replacement for many types of conventional lighting applications.

### 7. Wide range of application

Can be used in all the required areas of lighting. Applications for EXL lamps include industrial lighting, commercial lighting and office lighting as well as street and solar street lighting.

**\*Also Available 10000 Burning Hours Lamps.**

# COMPARISON

HPSV vs. EXL



70 w 70 w 70 w

Sodium Lamp



70 w

EXL Lamp

**MH Lamp 150Watt = EXL 70 Watt**



**Metal Halide**

**EXL**

**LED 90-100 Lux/ W = EXL 100-120 Lux/ W**



CT - 5500 K  
CRA - Ra70-80  
LUX - 90-110/W

CT - 4300 K  
CRA - Ra 90  
LUX - 100-125/W

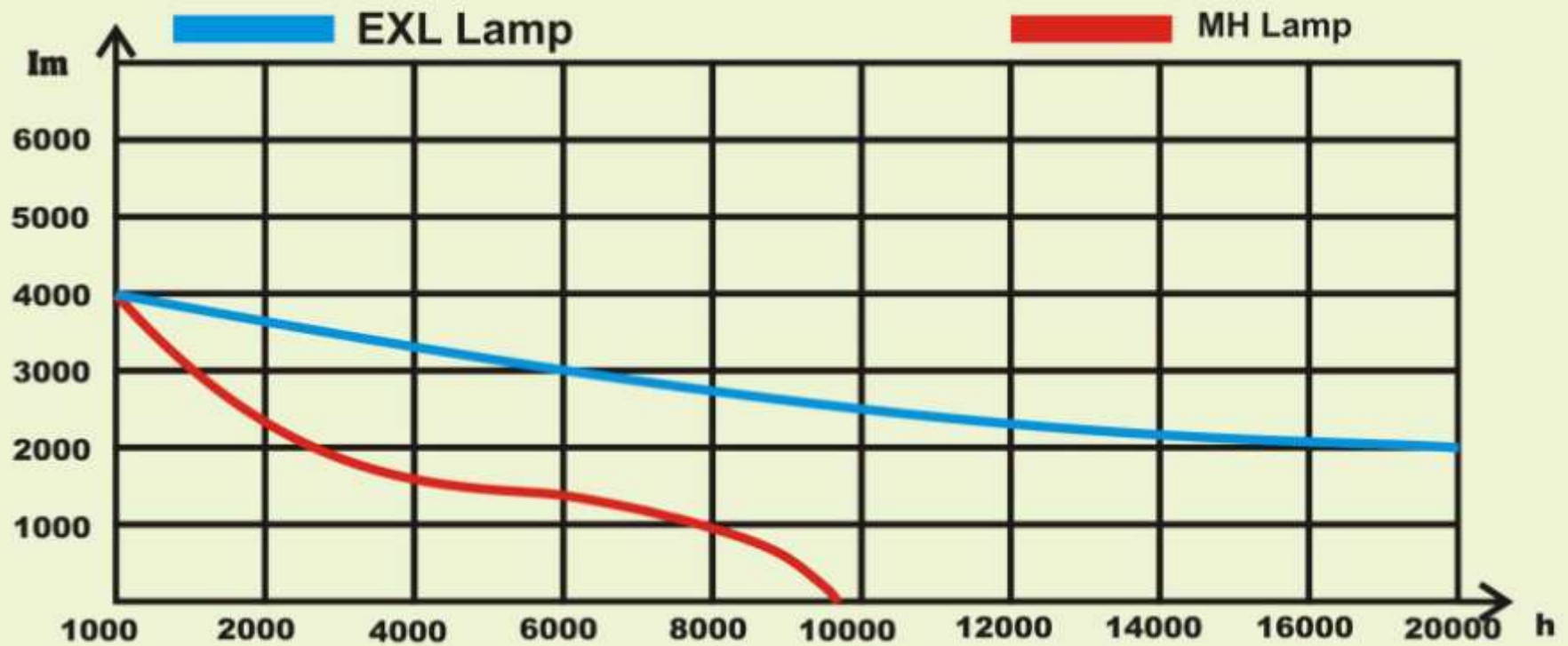
**LED**

**EXL**

# LED vs. EXL

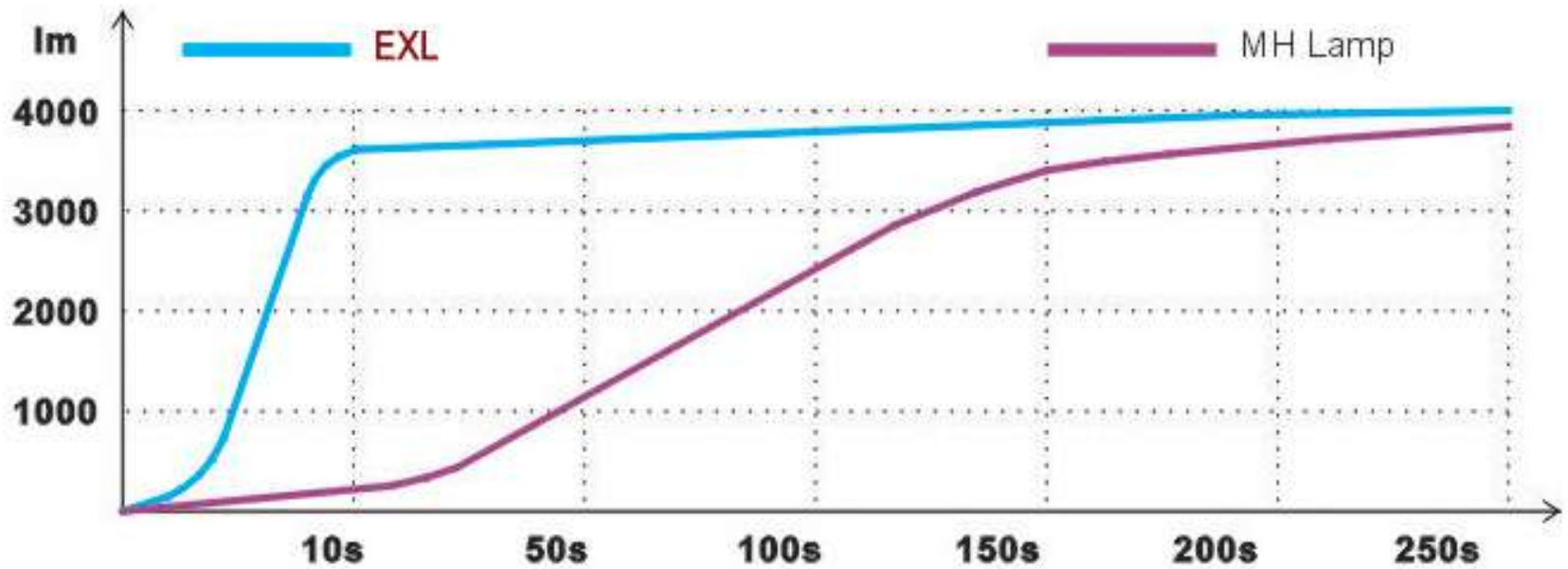
- LED 50watt = EXL 35watt
- LED 70watt = EXL 50watt
- LED 100watt = EXL 70watt
- LED 200watt = EXL 150watt

## Luminous Flux Maintenance Curves of EXL & MH Lamps



# Stabilizing Time Curve of EXL

Stabilizing Time Curve of EXL ,CDM & MH Lamps

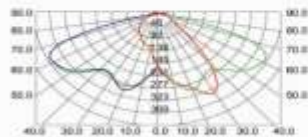


# Illumination Details

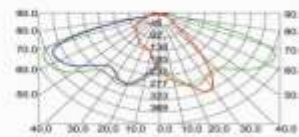
Parameter	EXL		LED		HPSV	
Power (W)	35	50	36	60	150	250
Illumination LX (8 meters)	30	55	14	18	35	50
Illumination Lumens /Watt	100-120		80-90		70	
<b>Colour</b> temperature K	4300-6000	4300-6000	6000	6000	2300	2300
<b>Colour</b> -Ra	75-95	75-95	70-90	70-90	30	30



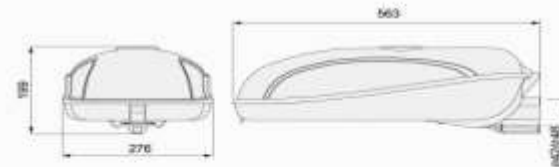
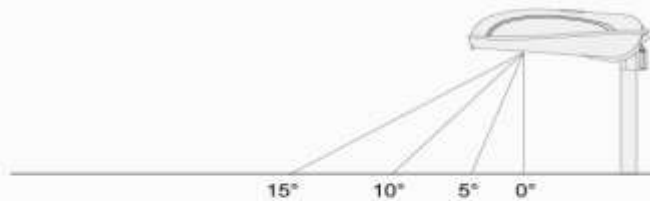
(cd/1000lm)  
Light distribution curve



EXL 70 SA



EXL 150 SA


**Materials and features:**

High pressure die-casting aluminum alloy body, anti-corrosion and treated by electro-static powder spraying.

Heatproof Silicon gasket , safety tempered glass with the good transperence.

High purity anodic oxidation aluminum reflector.

Lamp can adjust up and down or around and change the projection angle.

**Applicable places:**

The illumination of urban roads, port and factories etc.

Item No.	Light Source	Power	cosφ	Power factor	Voltage	Lamp type
TVZ 798-1	EXL 70 SA	70W	>	0.95	AC220V	E27/E40
TVZ 798-2	EXL 150 SA	150W	>	0.95	AC220V	E27/E40

# Road light fixture Advantages

Regular fixtures



Model 728/I,IV





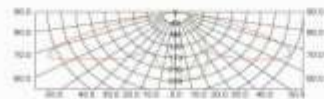




(cd/1000lm)  
Light distribution curve



EXL 100 W



EXL 150 W

#### Materials and features:

High pressure die-casting aluminum alloy body, anti-corrosion and treated by electro-static powder spraying.

Heatproof Silicon gasket , safety tempered glass with the good transparency.

High purity anodic oxidation aluminum reflector.

#### Applicable places:

The illumination of urban roads, highways, over-head road, bridge, port and factories etc.

Item No.	Light Source	Power	Lamp Type
TVZ 920	EXL 100 SA	100 W	E40
TVZ 920	EXL 150 SA	150 W	E40

Mast-arm Mast-top mounting with possibility of inclination of the fixtures



# Road and Parking light Light Fixtures



# Down Factory Light

- a



75 Watt =

# LED LIGHTS

## 40 WATT LED Street Light Fitting



# LED Flood Light



# LED vs. MHL

- **MHL 100 watt = LED 50watt**
- **MHL 150 watt = LED 70watt**
- **Life 8000 Hr = 50000 Hr**
- **Power factor .98**

# Solar LED Street Light



Model No	Operation Time	Light Out put Lumins	Type of Luminor	Battery Type	Solar Panel Wattage	Pole High From Ground Level
TSL - 10 D-D	11 Hours	5000 to 5500 K 950-1000 Lumins	LED -50,000 Hrs Life	26 AH	35 Watt	12 Feet
TSL - 20/10 D-D	11 - 12 Hours	2000 Lumins upto 10' Clock 10-6 Clock 1000 Lumins	LED-50,000 Hrs Life	46 AH	50 Watt	12 Feet
TSL - 40/20 D-D	11-12 Hours	4000 Lumins upto 10' Clock 10-6 Clock 2000 Lumins	LED-50,000 Hrs Life	120 AH	120 Watt	15 Feet

# POWERTEC CONTROL INSTRUMENTS

POWERTEC CONTROL INSTRUMENTS

# 24 DSP Compound, Lakshmipuram

Ganapathy, Coimbatore - 6

Tamilnadu, India. Ph: 91 – 422 – 4212559

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[www.iintechdefence.com](http://www.iintechdefence.com)



**SAVINGS – HED150W Vs. HPS 400W**

<i>Type of luminaries</i>	<i>HED Lamp</i>	<i>HPS Lamp</i>	<i>Savings</i>
<i>Lamp Watts</i>	150	400	<b>Per year</b>
<i>Illumination level</i>	>96L/Watt	>96L/Watt	
<i>Number of luminaries</i>	1	1	1
<i>Energy Consumption of each luminaries in wattage</i>	150	400	250
<i>Total energy consumption in Wattage</i>	150	400	250
<i>Energy consumption in KW</i>	0.15	0.4	0.25
<i>Working hours per day</i>	10	10	
<i>Working days per year</i>	365	365	
<i>Total working hours per year</i>	3650	3650	
<i>Total units KWHr</i>	547.5	1460	Units 912.5 / yr
<i>Value of Electricity @ Rs. 5 per unit</i>	2737	7300	<b>Rs. 4563.00.</b>
<i>Electricity saved on 15000 hours life - Units</i>			Units 3375
<i>Electricity saved on 15000 hours life – Rs.</i>			Rs. 16800.00