

## High Intensity Discharge Lamps – the most efficient light sources. Solutions for quality of light and reliability.

When considering lamp life, light efficiency and excellent colour rendering, GE's Ceramic Metal Halide range is the perfect solution in terms of energy saving without compromising quality of light. From retail, decorative or industrial applications to outdoor applications like floodlighting or city beautification the wide range of GE Ceramic Metal Halide products has been designed to provide the highest standard of quality lighting with the widest flexibility for all design needs. Ceramic Metal Halide lamps today represent the most advanced technology to deliver unbeatable product reliability and performance.

GE also provides a wide range of Lucalox™ High Pressure Sodium products for street lighting and industrial applications. GE's Lucalox™ range offers outstanding efficacy, extremely long life and reliability to meet increasing performance expectations and new regulations in these market segments. The Lucalox™ XO (Extra Output) and Lucalox™ XO Superlife lamps offer the highest energy efficient solutions with long lifetime.

### Benefits of Ceramic Metal Halide (CMH)

- Highly controllable point source of light
- Wide range of wattages from 20W to 400W in elliptical, tubular, linear single and double ended and reflector shapes
- High efficacy – up to 105 lm/W
- Long life – up to 24,000 hours
- Bright light and excellent colour rendering
- Consistent colour over life
- Two colour temperatures: 3000K and 4200K
- UV control
- Direct replacement of High Pressure Sodium and Quartz Metal Halide lamps
- High reliability
- Universal burning position for most lamp types

### Benefits of High Pressure Sodium (HPS)

- Energy efficiency up to 150lm/W
- Lumen output up to 130,000 lumens
- Lifetime up to 55,000 hours
- Wide product range from 50W to 1000W



## Indoor Lighting

### Quality of Light



#### ConstantColor™ CMH – Single Ended, Double Ended and Reflectors

ConstantColor™ Ceramic Metal Halide (CMH) lighting offers a high quality light source for a wide range of applications.

- High colour rendering
  - Allows merchandise to be seen in the best lighting conditions and reveals features, detail, colour and texture
- Stable colour through life
  - Merchandise looks more attractive for longer
  - Instills confidence in store's fashion or quality awareness
- High lumen output
  - High luminance levels to attract customers into stores
  - Creates lively visual environment
- Long life – to reduce maintenance cost

### Energy Saving



#### ConstantColor™ CMH Miniature – Supermini & MR16

GE technology has always been at the forefront of CMH lighting with products that deliver the best possible energy efficiency as well as excellent performance

- Outstanding efficiency >80lm/W for 3000K
- 20W available in 830, 35W available in 930 and 942
- Robust design for reliability
- Compact size for fixture flexibility and better optical efficiency
- More stable colour through life
- Improved life performance
- Easy to fit
- Multiple beam spreads for MR16 12°, 25°, 40°

## The power of CMH From the leader in miniature CMH technology

Energy saving is not only a cost saving but is also a social responsibility, and the lighting industry is constantly researching products that produce more light using less electricity. GE is in the vanguard of this research and the company's CMH Supermini range is exceptionally efficient. Coupled with an efficient spotlight fixture, Superminis yield massive energy saving because they generate extremely high luminous flux in a very small space. In the retail environment, in particular, this provides a significant saving with no loss of lighting quality.



### Key features

- Outstanding efficiency: four times better than halogen
- Compact capsule, or reflector version
- Outstanding long life – up to 12,000 hours
- Robust and reliable
- Colour uniformity lamp to lamp
- Stable colour throughout lamp life
- Small size enables better optical design
- Simple ballast and lamp holder change

### Applications

- Display lighting
- Spot and track lighting
- Mini floodlighting
- Indoor/outdoor

### NEW for 2010

**Ultra versions coming soon**  
Ultra versions of the 35W Supermini and MR16 lamps will be released soon – the benefits of Ultra combined with the benefits of miniaturisation.

### Energy Efficient

If we compare CMH 20W with a 50W halogen lamp, there are four primary attributes to consider. These are: life, lumen, efficacy and heat. CMH 20W wins in every area!

#### CMH 20W vs 50W Halogen

	Life [h]	Lumens [lm]	Efficacy [lm/w]	Heat [W]
50W Halogen Capsule	4,000	900	18	33W
CMH 20W Supermini	12,000	1615	80.8	7W
	x3	x1.8	x4.6	20%

- 20% of beam heat
- 80% more light
- Three times the life
- 4.5 times better efficiency

#### End User Benefits

- Reduced air conditioning costs
- More design potential
- Reduced replacement costs
- Reduced energy costs



# ConstantColor™ CMH Ultra

## The new generation of CMH

Our next generation of CMH lamps are the ultimate light source for retail applications where quality of light, colour and efficacy are important. Now, anyone with critical colour needs can enjoy the outstanding energy efficiency and the savings that CMH lamps provide.

### Key features

- 35W and 70W 3000K CMH lamps in G12 and G8.5 formats
- New arc tube design – lumen maintenance and colour rendering (CRI) are both significantly improved vs. standard CMH, while maintaining our industry leading 15,000 hours life
- The 930 colour gives a true representation of all colours in the spectrum
- These lamps will operate in any existing CMH70 and 35 G12 or G8.5 systems. In addition, they are compatible with both electronic and magnetic ballasts

### Applications

- Retail and accent lighting
- General retail display
- Wherever current generation CMH 35&70W G12 and G8.5 products are in use



### Benefits

- Extended service life and lamp replacement cycles
- Creates a higher level product offering through improved lumen maintenance and colour rendering
- Improved lumen maintenance keeps stores brighter longer



# High Intensity Discharge Lamps

## Advanced lighting technologies

### CMH Single Ended Mini G8.5

#### With ULTRA efficient lighting

- New generation - more usable light over life, 33% more lumen output at end of life vs. standard CMH lamps
- Excellent 930 colour
- Outstanding long life up to 15,000 hours



### CMH Single Ended G12

#### With ULTRA efficient lighting

- New generation - more usable light over life, 33% more lumen output at end of life vs. standard CMH lamps
- Excellent 930 colour
- Outstanding long life up to 15,000 hours



### CMH Supermini

#### Improved Versatility

- Allows miniaturisation of fixtures (only 52mm long)
- Available in 20W and 35W versions
- 35W available in 930 & 942 colours
- 35W Ultra version coming soon, high performance 20W coming in October 2010



### CMH Precise MR16

#### Improved Versatility

- World's smallest CMH reflector lamp. Beam angles: 12°, 25° & 40°
- Industry standard GX10 base
- 35W available in 930 & 942 colours
- 35W Ultra version coming soon, high performance 20W coming in October 2010



### CMH PAR 20 & 30

#### Design upgrade

- New design without metal ring
- The 4200K colour temperature offers flexibility to lighting designers



### CMH Open Rated

#### Performance Upgrade

- Protective shroud allows for use in open-fixtures
- 10-20% more efficient than standard metal halide
- Fits standard HPS and metal halide sockets



### CMH 250W

#### Performance Upgrade

- A leading combination of quality and efficient light versus other HID lamps
- Lamp life – 24,000 hours
- Colour consistency and 80+ CRI



### CMH 400W

#### Performance Upgrade

- Highest wattage CMH available
- Lamp life – 20,000 hours
- Colour consistency and 80+ CRI



### CMH TD Range

#### Unique Range

- New 35W added to 70W and 150W range
- 35W allows energy saving in wall-wash fixtures



### Dimmable CMH for street lighting

#### Energy Savers

- Lamp is dimmable to 70% without significant impact to lamp colour
- Greater than 65 CRI when 50% dimmed
- Available in 150W, 4000K



### CMH Tubular 50-150W

#### Improved Versatility

- Quality of light
- Lamp life up to 20,000 hours
- Colour consistency and 80+ CRI
- New generation tubular 50-150W coming in October 2010



### CMH Elliptical 70-100W

#### Improved Versatility

- Quality of light
- Lamp life up to 15,000 hours
- Colour consistency and 80+ CRI



## Outdoor Lighting

### Prime Requirements

- High efficacy and long service life to minimize cost
- Create high uniform lighting on the road for safety reasons
- Better colour appearance and rendering for visual needs of pedestrians

### Quality of Light



### CMH – street lighting – bright, safe white light

It is generally observed that white light makes it easier for drivers to recognize shapes and colour, particularly in the peripheral vision. For pedestrians white light promotes a feeling of security and confidence, much more than under yellow or orange street lighting.

#### A comprehensive range of CMH lamps are available and provide excellent benefits:

- High efficacy and long life to minimize cost and reduce emission of CO<sub>2</sub> for better environment
- Compact source, allowing flexible optical design to achieve high illumination uniformity on the road
- Better colour appearance and rendering for visual needs of pedestrians
- Improved feeling of security
- Dimmable Mesopic CMH lamp – is able to achieve a brighter level of light output better matched to human eye sensitivity and at a reduced power

**A brand new range of CMH outdoor lighting will be available in October 2010.**

### Solution for Reliability



### Lucalox™ XO – solution for reliability in street lighting

GE Lucalox™ XO High Pressure Sodium lamps offer outstanding luminous efficacy, lumen maintenance and long life, thus reducing energy and maintenance costs.

#### These lamps deliver a new level of reliability by a comprehensive redesign of the lamp construction:

- Revolutionary arc tube design (monolithic) – for simpler, more robust construction
- Precise arc tube sealing process
- New getter material improves vacuum protection
- New starting aid GRS (GE Reliable Starting Technology) improves lumen maintenance
- Direct replacement for standard Lucalox™
- Up to 150 lm/W – currently the most efficient lamp within the HID range
- Life up to 32,000 hours – the longest life lamp in the HID range in single arc tube design
- Dimmable on electromagnetic and GE approved electronic ballasts

# GE ConstantColor™ CMH StreetWise

## Naturally better, naturally safer.

GE ConstantColor™ CMH StreetWise ceramic metal halide lamps have been designed as the easy-fit replacement for outdated technologies. They are also the logical first choice for new installations.

They are fitted with standard E27/E40 bases and can be dimmed, they outperform most standard HID systems. And with high reliability and sustained lumen output across a longer working life of 16,000 hours, they are supremely cost effective.

They support electronic and electromagnetic ballasts and are compatible with the major street light ballasts, retrofitting the existing HPS systems. Approved ballasts included Tridonic and Harvard and the ballast testing process is on-going with other major manufacturers. If you have any particular needs please contact your GE sales representative.

StreetWise ceramic metal halide lamps are the excellent white light energy efficient choice, offering:

- **Lowest total cost of ownership**
- **Wide range: 50/70/100/150 Watts**
- **Dimmable for all wattages for further energy saving**
- **System flexibility, operating on both electronic and electromagnetic ballasts**
- **Standard E27/E40 bases for simplicity**
- **Compatible with existing fixtures and optics**
- **Same size and LCL as current HPS**
- **Horizontal burning position**

### When to specify StreetWise

In applications where lighting class reduction using lamps above Ra8 60 can be considered, StreetWise is a clear leader. Its excellent Ra8 value of 70 provides improved colour rendering over similar systems of comparable life and efficacy.



NEW  
for 2010

Applications include:

CMH StreetWise range can be applied ...

- **Specify in new installations.** Achieve very high efficiency with standard bases and flexible ballast choices.
- **Replace HPS or mercury applications.** Dimmable CMH will achieve lowest cost and most efficient white light.
- **Choose instead of HPS.** Benefits include white light and lower energy at similar lumen output for same wattage.
- **Replace mercury vapour installations.** Lower Watt CMH will maintain white light at similar lumen and save the most energy.



## GE Lucalox™ XO Extra Output

The ideal lamp for road lighting. Improved quality brings down life-cycle costs by reducing spot replacements. Extended lamp life means less lamps for disposal and further cost savings as stricter waste legislation becomes imposed.

### Improved reliability The simplicity of the design

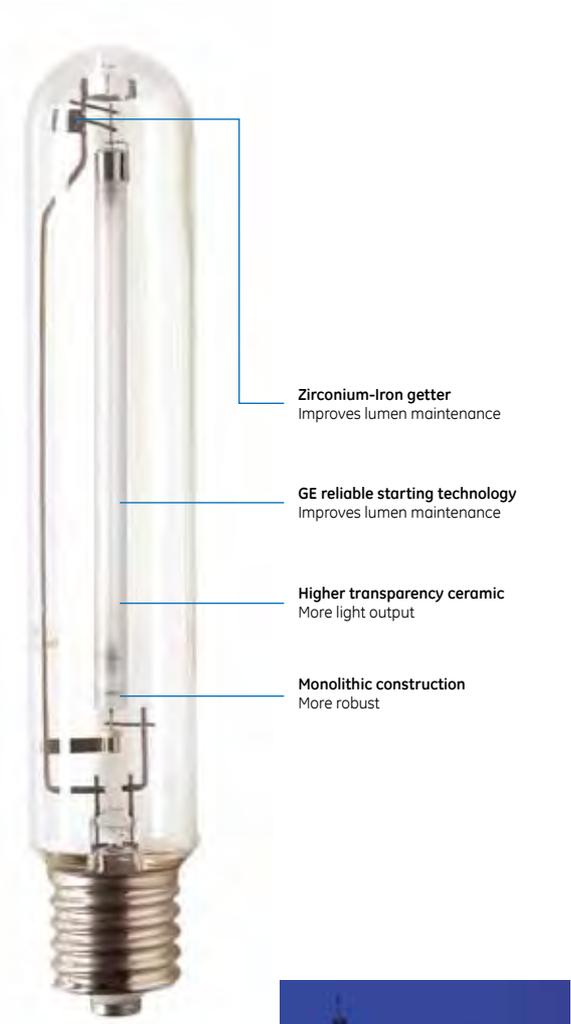
Lucalox™ XO lamps are of very robust and reliable construction, designed to meet the most demanding requirements. There are fewer parts and only 5 critical welds.

Simplicity and robustness deliver higher reliability, even for exposed, vibration prone roadway situations.

In addition, they are compatible with both electronic\* and magnetic ballasts.

\*GE approved electronic ballast

- Lucalox™ XO lamps reach luminous efficacy up to 150 lumens/watt
- Lucalox™ XO lamps, due to their high efficacy, are an outstanding economical solution to combat rising energy costs
- Lucalox™ XO lamps combine excellent lumen maintenance with extended life
- Lucalox™ XO lamps combine long life and excellent luminous efficacy to reduce their impact on the global environment



Zirconium-Iron getter  
Improves lumen maintenance

GE reliable starting technology  
Improves lumen maintenance

Higher transparency ceramic  
More light output

Monolithic construction  
More robust



# Selector

## CostantColor™ CMH (Ceramic Metal Halide) T, TC, TD



### Single Ended Mini Ultra and Standard

Cap: G8.5  
Wattages: 20-70W  
Colours: 830, 930, 942  
Life: 12,000-15,000Hrs  
Page: 45



### Single Ended Supermini Ultra and Standard

Cap: G6.5  
Wattages: 20-35W  
Colours: 830, 930, 942  
Life: 10,000-12,000Hrs  
Page: 45



### Single Ended Ultra and Standard

Cap: G12  
Wattages: 20-150W  
Colours: 830, 842, 930,  
942  
Life: 12,000-15,000Hrs  
Page: 45



### Double Ended

Cap: RX7s or RX7s-24  
Wattages: 35-150W  
Colours: 830, 942  
Life: 10,000-15,000Hrs  
Page: 45

## CostantColor™ CMH (Ceramic Metal Halide) Reflectors



### MR16 Ultra and Standard

Cap: GX10  
Wattages: 20-35W  
Colours: 830, 930, 942  
Life: 10,000-12,000Hrs  
Page: 46



### PAR20

Cap: E27  
Wattages: 20-35W  
Colours: 830, 942  
Life: 10,000-12,000Hrs  
Page: 46



### PAR30

Cap: G23  
Wattages: 20-70W  
Colours: 830, 942  
Life: 10,000-13,000Hrs  
Page: 46

## CostantColor™ CMH (Ceramic Metal Halide) Elliptical and Tubular



### Elliptical

Cap: E27, E40  
Wattages: 70-400W  
Colours: 830, 940  
Finish: Clear or Diffuse  
Life: 15,000-24,000Hrs  
Page: 47



### Open Rated Elliptical

Cap: E27  
Wattages: 70-150W  
Colours: 940, 942  
Finish: Clear or Diffuse  
Life: 15,000Hrs  
Page: 47



### New Generation of Tubular

Cap: E27, E40  
Wattages: 50-150W  
Colours: 730  
Finish: Clear  
Life: 16,000Hrs  
Page: 47



### Tubular

Cap: E27, E40  
Wattages: 70-400W  
Colours: 830, 842, 942  
Finish: Clear  
Life: 10,000-24,000Hrs  
Page: 47



### Open Rated Tubular

Cap: E40  
Wattages: 150W  
Colours: 830, 942  
Finish: Clear  
Life: 12,000Hrs  
Page: 47

## CMH Ballasts



### CMH Ballasts

A range of ballasts  
for 20-35W  
CMH lamps  
Page: 47

# High Intensity Discharge Lamps

## Arcstream Metal Halide

Operates on suitable metal halide/high pressure sodium ballast and metal halide ignitor



### Single Ended

Cap: G12  
Wattages: 70-150W  
Colours: 3000-4200K  
CRI: 72-75  
Life: 6,000Hrs  
Page: 48



### Double Ended

Cap: Rx7s-Fc2  
Wattages: 150-250W  
Colours: 3000-5200K  
CRI: 80-85  
Life: 6,000Hrs  
Page: 48



### Double Ended Coloured

Cap: RX7s-24  
Wattages: 150W  
Colours: Green, Blue, Orange/Magenta  
Life: 6,000Hrs  
Page: 48

## Multi-Vapour Metal Halide

Operates from CWA Control Gear



### Elliptical

Cap: E40  
Wattages: 250W  
Colours: 4000-6000K  
CRI: 65-90+  
Finish: Clear or Diffuse  
Life: 10,000-14,000Hrs  
Page: 48



### Tubular

Cap: E40  
Wattages: 250-400W  
Colours: 4200-6000K  
CRI: 70-90+  
Finish: Clear  
Life: 10,000Hrs  
Page: 48



### Standard - Elliptical

Cap: E40  
Wattages: 250-1000W  
Colours: 3700-4200K  
CRI: 65-70  
Finish: Clear or Diffuse  
Life: 10,000-20,000Hrs  
Page: 49



### High Output - Elliptical

Cap: E40  
Wattages: 250-400W  
Colours: 3000-4000K  
CRI: 65-70  
Finish: Clear or Diffuse  
Life: 20,000Hrs  
Page: 49

## Kolorarc™ Metal Halide

Operates from suitable mercury or metal halide ballast rated 3.5A and metal halide ignitor



### Elliptical

Cap: E40  
Wattages: 400W  
Colours: 4000-6000K  
CRI: 65-90  
Finish: Clear or Diffuse  
Life: 10,000-14,000Hrs  
Page: 49



### Tubular

Cap: E40  
Wattages: 400W  
Colours: 6000K  
CRI: 90  
Finish: Clear  
Life: 10,000Hrs  
Page: 49

## Sportlight Metal Halide

For sports and floodlighting



### Linear

Cap: RX7s - spec  
Wattages: 1500-2000W  
Colours: 5200 - 5400K  
CRI: 65  
Life: 6,000Hrs  
Page: 49



### Tubular Clear

Cap: E40  
Wattages: 1000-2000W  
Colours: 6000K  
CRI: 93  
Life: 5,000-8,000Hrs  
Page: 49



### Internal Ignitor

Cap: E40  
Wattages: 2000W  
Colours: 6000K  
CRI: 93  
Life: 5,000Hrs  
Page: 49

# Selector

## High Pressure Sodium



### Lucalox™

Cap: E27, E40  
Wattages: 50-1000W  
Finish: Tubular Clear or Elliptical Diffuse  
Life: 24,000-28,500Hrs  
Page: 50-51



### Lucalox™ XO

Cap: E27, E40  
Wattages: 50-600W  
Feature: Extra high lumen output  
Finish: Tubular Clear or Elliptical Diffuse  
Life: 28,500-32,000Hrs  
Page: 50



### Lucalox™ PSL

Cap: E40  
Wattages: 250-750W  
Feature: Designed for Greenhouse lighting  
Finish: Tubular Clear  
Life: 10,000-12,000Hrs  
Page: 51

## High Pressure Sodium – Others



### Lucalox™ TD

Cap: RX7s-24  
Wattages: 250-1000W  
Life: 20,000Hrs  
Page: 51



### Lucalox™ E-Z Lux™

Cap: E27  
Wattages: 110W  
Feature: Direct replacement for mercury lamps  
Life: 16,000Hrs  
Page: 51



### Lucalox™ Internal Ignitor

Cap: E27  
Wattages: 50-70W  
Feature: Internal ignitor  
Finish: Elliptical Clear or Diffuse  
Life: 12,000Hrs  
Page: 51



### Lucalox™ XO Superlife

Cap: E27, E40  
Wattages: 50-400W  
Feature: Extra high lumen output and Twin Arc tubes for extra life  
Finish: Tubular Clear or Elliptical Diffuse  
Life: 40,000-55,000Hrs  
Page: 50



### Lucalox™ Superlife

Cap: E27, E40  
Wattages: 50-400W  
Feature: Twin Arc tubes for extra life  
Finish: Tubular Clear or Elliptical Diffuse  
Life: 40,000-55,000Hrs  
Page: 50

## Mercury Lamps



### Kolorlux Standard

Cap: E27, E40  
Wattages: 50-400W  
Life: 20,000Hrs  
Page: 52



### Kolorlux Deluxe

Cap: E27, E40  
Wattages: 50-400W  
Life: 20,000Hrs  
Page: 52



### Mixed Light

Cap: E27, E40, B22  
Wattages: 160-500W  
Voltage: 230-240V or 240-250V  
Life: 8,000Hrs  
Page: 52

# High Intensity Discharge Lamps

## Product identification

The following glossary of terms will help you when selecting lamps in this section. Within each product line, lamps are divided into families – within these families, lamps are listed by wattage. The Product Description can be used as a quick reference to each product's attributes. Where Life or Average Life are stated we refer to the industry standard definition of how many hours of operation 50% of a given installation will exceed.

### Additional parameters:

**CCT [K]:** Colour Temperature – Kelvins  
A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value the whiter or "cooler" the light appears.

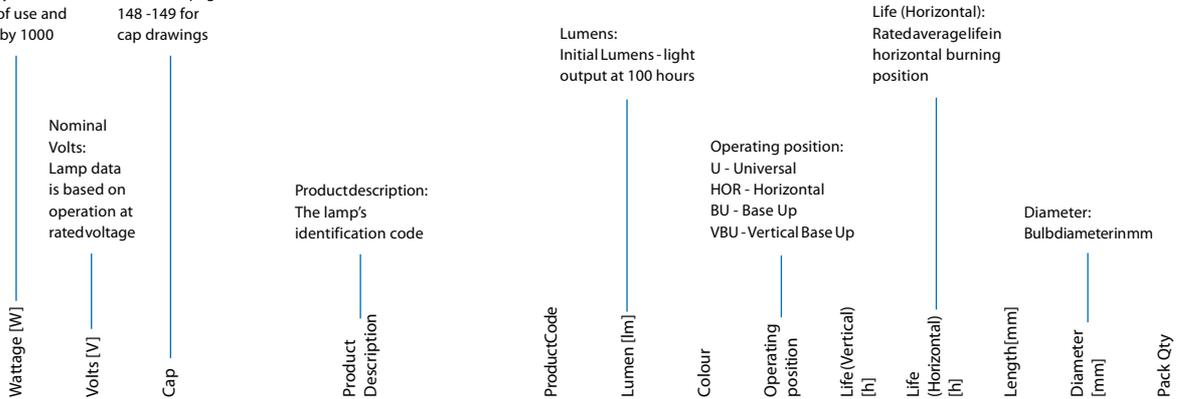
**CRI [Ra]:** Colour Rendering Index  
An indication of the ability of the lamp to render object colours in a normal, natural way. The higher the number (0-100), the better the colour appearance.

### Watts:

Energy Used – Nominal Watts.

To estimate energy consumption (kWh), multiply watts x hours of use and divide by 1000

Cap: The type of cap fitted. See page 148 -149 for cap drawings



### ConstantColor™ - CMH Supermini

20	95	GU6.5	CMH20/T/UVC/830/GU6.5	40399	1615	830	U	12,000	12,000	52	13	12
35	95	GU6.5	CMH35/T/UVC/930/GU6.5	88656	3400	930	U	10000*	10,000*	52	13	12

**CMH 70 / T / UVC / U / 9 30 / G12 ULTRA**

- 70**: (70) Identifies Lamp's wattage
- T**: (T) Identifies the lamp format.
- UVC**: (UVC) UV Control
- U**: (U) Operating Position
- 9**: (9) Colour rendering 6 - Ra 58 to 67 (Group 2B)
- 30**: (30) Colour temperature XX = First 2 digits of temperature in Kelvin - XX00K Example: 30 is 3000K
- G12**: (G12): Identifies the cap type
- ULTRA**: (ULTRA) Identifies the lamp format.

(CMH) Product Family  
 CMH - ConstantColor™ CMH  
 ARC - Arcstream™  
 KRC - Kolorarc™  
 MPR/MVR - Multi-Vapor™  
 SPL - Sportlight™  
 LU - Lucalox™  
 H - Mercury  
 ML - Blended Light  
 BLS - Ballast

TD - Double Ended  
 E - Elliptical Clear  
 D - Elliptical Diffused  
 L - Linear  
 PARxx - PAR + size  
 T - Tubular Clear

**Colour:** Combination of colour rendering and colour temperature

**Length:** Lamplength in mm

**Product code:** It is important to use this code when ordering to ensure that you receive the exact product you require

**Life (Vertical):** Rated average life in vertical burning position

**Pack quantity:** Number of product units packed in a case

## ConstantColor™ CMH Lamps

Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	Colour	Operating position	Life (Vertical) [h]	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>ConstantColor™ - CMH Supermini</b>												
20	95	GU6.5	CMH20/T/UVC/830/GU6.5	40399	1615	830	U	12,000	12,000	52	13	12
35	95	GU6.5	CMH35/T/UVC/930/GU6.5	88656	3400	930	U	10000*	10,000*	52	13	12
35	90	GU6.5	CMH35/T/UVC/930/GU6.5 Ultra	76122	3500	930	U	12000*	12,000*	52	13	12
35	95	GU6.5	CMH35/T/UVC/942/GU6.5	88657	3400	942	U	12000*	12,000*	52	13	12

\*Initial life claim at launch. Testing continues to final design life.

### ConstantColor™ - CMH Single Ended Mini

20	90	G8.5	CMH20/TC/UVC/U/830/G8.5 PLUS**	39858	1650	830	U	12,000	12,000	85	14.5	12
35	90	G8.5	CMH35/TC/UVC/U/830/G8.5 PLUS**	43273	3400	830	U	16,500	16,500	85	14.5	12
35	90	G8.5	CMH35/TC/UVC/U/942/G8.5	26348	3200	942	U	18,000	18,000	85	14.5	12
35	92	G8.5	CMH35/TC/UVC/U/930/G8.5 Ultra	76120	3500	930	U	15,000	15,000	85	14.5	12
70	90	G8.5	CMH70/TC/UVC/U/830/G8.5 PLUS**	43274	6200	830	U	15,000	15,000	85	14.5	12
70	90	G8.5	CMH70/TC/UVC/U/942/G8.5	26349	6200	942	U	15,000	15,000	85	14.5	12
70	90	G8.5	CMH70/TC/UVC/U/930/G8.5 Ultra	96751	6200	930	U	15,000	15,000	85	14.5	12

\*Initial life claim at launch. Testing continues to final design life.

### ConstantColor™ - CMH Single Ended

20	90	G12	CMH20/T/UVC/U/830/G12 PLUS**	42708	1650	830	U	12,000	12,000	90	14.5	12
35	90	G12	CMH35/T/UVC/U/830/G12 PLUS**	43272	3400	830	U	16,500	16,500	90	14.5	12
35	90	G12	CMH35/T/UVC/U/842/G12	92141	3200	842	U	18,000	18,000	90	14.5	12
35	92	G12	CMH35/T/UVC/U/930/G12 Ultra	76121	3500	930	U	15,000	15,000	90	14.5	12
70	90	G12	CMH70/T/UVC/U/830/G12	20005	6200	830	U	15,000	15,000	90	19	12
70	90	G12	CMH70/T/UVC/U/942/G12	20013	6300	942	U	15,000	15,000	90	19	12
70	90	G12	CMH70/T/UVC/U/930/G12 Ultra	96752	6400	930	U	15,000	15,000	90	19	12
150	93	G12	CMH150/T/UVC/U/830/G12	20012	14000	830	U	12,000	12,000	100	19	12
150	93	G12	CMH150/T/UVC/U/942/G12	20014	13000	942	U	12,000	12,000	100	19	12

### ConstantColor™ - CMH Double Ended

35	90	RX7s	CMH35/TD/UVC/830/RX7s	43278	3400	830	HOR±45°	-	15,000	118	21	12
70	90	RX7s	CMH70/TD/UVC/830/RX7s	36910	7000	830	HOR±45°	-	15,000	118	21	12
70	90	RX7s	CMH70/TD/UVC/942/RX7s	38698	6200	942	HOR±45°	-	15,000	118	21	12
150	96	RX7s-24	CMH150/TD/UVC/830/RX7s-24	36912	14500	830	HOR±45°	-	15,000	135	27	12
150	96	RX7s-24	CMH150/TD/UVC/942/RX7s-24	38692	12500	942	HOR±45°	-	15,000	135	27	12

\*Initial life claim at launch. Testing continues to final design life. \*\*3000K CMH lamps wit extended life



# High Intensity Discharge Lamps

Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Candela [cd]	Beam Angle [°]	Colour	Operating position	Life (Vertical) [h]	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>ConstantColor™ - CMH MR16 Precise</b>													
20	95	GX10	CMH20/MR16/UVC/830/GX10/SP	40400	9000	12	830	U	12,000	12,000	54.5	51	12
20	95	GX10	CMH20/MR16/UVC/830/GX10/FL GX10	40401	2900	25	830	U	12,000	12,000	54.5	51	12
20	95	GX10	CMH20/MR16/UVC/830/GX10/WFL GX10	42691	1500	40	830	U	12,000	12,000	54.5	51	12
35	90	GX10	CMH35/MR16/UVC/930/GX10/SP GX10	88658	16000	12	930	U	10,000*	10,000*	54.5	51	12
35	90	GX10	CMH35/MR16/UVC/930/GX10/FL GX10	88659	5500	25	930	U	10,000*	10,000*	54.5	51	12
35	90	GX10	CMH35/MR16/UVC/930/GX10/WFL GX10	88660	3000	40	930	U	10,000*	10,000*	54.5	51	12
35	92	GX10	CMH35/MR16/UVC/930/GX10/SP Ultra	76123	16000	12	930	U	12,000	12,000	54.5	51	12
35	92	GX10	CMH35/MR16/UVC/930/GX10/FL Ultra	76124	5500	25	930	U	12,000	12,000	54.5	51	12
35	92	GX10	CMH35/MR16/UVC/930/GX10/WFL Ultra	76125	3000	40	930	U	12,000	12,000	54.5	51	12
35	90	GX10	CMH35/MR16/UVC/942/GX10/SP GX10	88661	16000	12	942	U	12,000*	12,000*	54.5	51	12
35	90	GX10	CMH35/MR16/UVC/942/GX10/FL GX10	88662	5500	25	942	U	12,000*	12,000*	54.5	51	12
35	90	GX10	CMH35/MR16/UVC/942/GX10/WFL GX10	88663	3000	40	942	U	12,000*	12,000*	54.5	51	12

\*Initial life claim at launch. Testing continues to final design life.

## ConstantColor™ - CMH PAR 20

20	95	E27	CMH20PAR20/UVC/830/E27/SP10	26478	13000	10	830	U	12,000	12,000	92	64	15
20	95	E27	CMH20/PAR20/UVC/830/E27/FL25	26481	3750	25	830	U	12,000	12,000	92	64	15
35	90	E27	CMH35/PAR20/UVC/830/E27/SP10	21684	22000	10	830	U	10,000	10,000	92	64	15
35	90	E27	CMH35/PAR20/UVC/830/E27/FL25	21685	7500	25	830	U	10,000	10,000	92	64	15
35	90	E27	CMH35/PAR20/UVC/942/E27/SP10	44890	19450	10	942	U	10,000	10,000	92	64	15
35	90	E27	CMH35/PAR20/UVC/942/E27/FL25	44919	6950	25	942	U	10,000	10,000	92	64	15

## ConstantColor™ - CMH PAR 30

20	95	E27	CMH20PAR30/UVC/830/E27/SP10	26497	19800	10	830	U	12,000	12,000	124	95.5	6
20	95	E27	CMH20PAR30/UVC/830/E27/FL25	26518	4900	25	830	U	12,000	12,000	124	95.5	6
35	90	E27	CMH35/PAR30/UVC/830/E27/SP10	21689	39600	10	830	U	10,000	10,000	124	95.5	6
35	90	E27	CMH35/PAR30/UVC/830/E27/FL 25	21690	11000	25	830	U	10,000	10,000	124	95.5	6
35	90	E27	CMH35/PAR30/UVC/942/E27/SP10	44939	36700	10	942	U	10,000	10,000	124	95.5	6
35	90	E27	CMH35/PAR30/UVC/942/E27/FL25	44942	10200	25	942	U	10,000	10,000	124	95.5	6
70	90	E27	CMH70/PAR30/UVC/830/E27/SP15	21683	42800	15	830	U	13,000	13,000	124	95.5	6
70	90	E27	CMH70/PAR30/UVC/830/E27/FL40	21682	10000	40	830	U	13,000	13,000	124	95.5	6
70	90	E27	CMH70/PAR30/UVC/942/E27/SP15	74620	33500	15	942	U	10,000	10,000	124	95.5	6
70	90	E27	CMH70/PAR30/UVC/942/E27/FL40	74619	9000	40	942	U	10,000	10,000	124	95.5	6



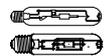
Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	Colour	Operating position	Life (Vertical) [h]	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>ConstantColor™ - CMH Elliptical Clear</b>												
70	97	E27	CMH70/E/UVC/U/830/E27/C	46189	6300	830	U	15,000	15,000	138	54	6
100	102	E27	CMH100/E/UVC/U/830/E27/C	46191	9200	830	U	15,000	15,000	138	54	6
150	95	E27	CMH150/UVC/O/U/942/E27/C	43285	13200	942	U	15,000	15,000	138	55	6



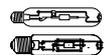
<b>ConstantColor™ - CMH Elliptical Diffuse</b>												
70	97	E27	CMH70/E/UVC/U/830/E27/D	46187	6000	830	U	15,000	15,000	138	54	6
70	97	E27	CMH70/UVC/O/U/940/E27/D	43282	5300	940	U	15,000	15,000	138	54	6
100	102	E27	CMH100/E/UVC/U/830/E27/D	46194	8700	830	U	15,000	10,000	138	54	6
150	95	E27	CMH150/UVC/O/U/940/E27/D	43286	12300	940	U	10,000	10,000	138	55	6
250	117	E40	CMH250/E/UVC/U/830/E40/D	10591	23500	830	U	24,000	24,000	227	90	6
400	120	E40	CMH400/E/UVC/U/830/E40	13087	39000	830/836**	U	20,000	20,000	282	120	6



<b>ConstantColor™ - CMH Tubular Clear</b>												
70	95	E27	CMH70/TT/UVC/830/E27	38752	6400	830	U	15,000	20,000	156	37	12
100	109	E40	CMH100/TT/UVC/830/E40	92478	9200	830	U	10,000	15,000	209	48	12
150	100	E40	CMH150/TT/UVC/830/E40	38749	14000	830	U	15,000	20,000	209	48	12
150	95	E40	CMH150/UVC/T/U/842/E40	21514	14500	842	U	15,000	15,000	209	48	12
150	100	E40	CMH150/UVC/O/T/U/830/E40	21516	14000	830	U	12,000	12,000	209	48	12
150	100	E40	CMH150/UVC/O/T/U/942/E40	21517	14000	942	U	15,000	15,000	209	48	12
250	110	E40	KRC250/CMH/830/T/H/E40	20302	20000	830	HOR	-	24,000	260	48	12
250	117	E40	CMH250/TT/UVC/U/830/E40	10589	25000	830	U	24,000	24,000	260	48	12
400	120	E40	CMH400/TT/UVC/U/830/E40	13067	41000	830/836**	U	20,000	20,000	278	60	12



<b>ConstantColor™ - CMH Tubular Clear StreetWise</b>												
50	90	E27	CMH50/TT/UVC/730/E27 STREETWISE	77400	5000*	730	HOR±15°	-	16,000	156	39	12
70	95	E27	CMH70/TT/UVC/730/E27 STREETWISE	77401	7640*	730	HOR±15°	-	16,000	156	39	12
100	100	E40	CMH100/TT/UVC/730/E40 STREETWISE	77399	10900*	730	HOR±15°	-	16,000	211	48	12
150	100	E40	CMH150/TT/UVC/730/E40 STREETWISE	77402	16300*	730	HOR±15°	-	16,000	211	48	12



\*Initial data, testing is still on-going \*\* 830 in horizontal burning position, 836 in vertical burning position

Wattage [W]	Volts [V]	Product Description	Product Code	Category	Weight [g]	Pack Qty
<b>CMH Ballast*</b>						
20	220-240	BLS/E/20W/CMH	78711	integral	N/A	12
20	220-240	BLS/E/20W/CMH/R/CC	78712	remote cable clamp	N/A	12
20	220-240	BLS/E/20W/CMH/R/LP	78713	remote lead plug	N/A	12
35	220-240	BLS/E/35W/CMH	78714	integral	N/A	12
35	220-240	BLS/E/35W/CMH/R/CC	78715	remote cable clamp	N/A	12
35	220-240	BLS/E/35W/CMH/R/LP	78716	remote lead plug	N/A	12

\*Range will be available from June 2010



# High Intensity Discharge Lamps

## Metal Halide Lamps



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Life (Vertical) [h]	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>Arcstream™ Single Ended  RG-2</b>													
70	95	G12	ARC70/T/U/730/G12	35794	5200	3000	75	U	6,000	6,000	90	21.5	10
70	95	G12	ARC70/T/U/842/G12	35795	5200	4200	72	U	6,000	6,000	90	21.5	10
150	95	G12	ARC150/G12/830	88654	12000	3000	80	U	6,000	6,000	76	21.5	10
150	95	G12	ARC150/G12/842	88655	11500	4200	80	U	6,000	6,000	76	21.5	10



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>Arcstream™ Double Ended UVC</b>												
70	95	RX7s	ARC70/UVC/TD/730/Rx7s	34530	5500	3000	75	HOR±45°	6,000	114	19	12
70	95	RX7s	ARC70/UVC/TD/742/Rx7s	34536	5500	4200	75	HOR±45°	6,000	114	22	12
150	95	RX7s-24	ARC150/UVC/TD/732/Rx7s-24	34527	12000	3200	75	HOR±45°	6,000	132	22	12
150	95	RX7s-24	ARC150/UVC/TD/742/Rx7s-24	34535	12000	4200	75	HOR±45°	6,000	132	25	12



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>Arcstream™ Double Ended  RG-3</b>												
150	110	RX7s-24	ARC150/TD/952/Rx7s-24	93772	11000	5200	90	HOR±45°	6,000	132	25	12
150	95	RX7s-24	ARC150/AQUA/TD/865/Rx7s-24	35284	11000	6500	85	HOR±45°	6,000	132	25	12
250	114	Fc2	ARC250/TD/832/Fc2	30099	20000	3200	75	HOR±45°	6,000	163	25	12
250	115	Fc2	ARC250/TD/842/Fc2	30101	20000	4200	75	HOR±45°	6,000	163	25	12



Colour	Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Operating position	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>Arcstream™ Double Ended Coloured </b>										
Green	150	95	RX7s-24	ARC150/UVC/TD/GREEN/RX7s-24	12181	HOR±45°	6,000	132	25	12
Blue	150	95	RX7s-24	ARC150/UVC/TD/BLUE/RX7s-24	12182	HOR±45°	6,000	132	25	12
Orange	150	95	RX7s-24	ARC150/UVC/TD/ORANGE/RX7s-24	12183	HOR±45°	6,000	132	25	12
Magenta	150	95	RX7s-24	ARC150/UVC/TD/MAGENTA/RX7s-24	12184	HOR±45°	6,000	132	25	12



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Life (Vertical) [h]	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>Arcstream™ Tubular Clear</b>													
250	112	E40	ARC250/T/H/742/E40	42357	21000	4200	70	HOR±15°	-	10,000	220	48	12
250	100	E40	ARC250/T/V/BU/960/E40	32665	19000	6000	90	BU±45°	10,000	-	220	47	12
250	100	E40	ARC250/T/H/960/E40	32664	19000	6000	90	HOR±45°	-	10,000	220	47	12
400	105	E40	ARC400/T/H/742/E40	42369	35000	4200	70	HOR±15°	-	10,000	260	47	12



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Life (Vertical) [h]	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>Arcstream™ Elliptical Diffuse</b>													
250	100	E40	ARC250/D/H/740/E40	16870	19500	4000	70	HOR±15°	-	14,000	227	91	10
250	100	E40	ARC250/D/H/960/E40	30047	17000	6000	90	HOR±45°	-	10,000	227	90	12
250	100	E40	ARC250/D/VBU/960/E40	32666	17000	6000	90	BU±45°	10,000	-	227	90	12

Operating from suitable metal halide/high pressure sodium (HPS) ballast and metal halide ignitor. Arcstream™ lamps are only suitable for operation in fully enclosed fixtures where lens/diffuser material must be able to contain fragments of hot quartz or glass (up to 1100 °C). WARNING: UV emitted from lamps in Risk Group 2 and 3. Avoid eye and skin exposure to unshielded product.



Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Life (Vertical) [h]	Life (Horizontal) [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>Multi-Vapor™ Elliptical Clear</b>													
250	135	E40	MVR250/U/40	44542	20800	4200	65	U	10,000	10,000	216	89	12
400*	135	E40	MVR400/U/40	43907	36000	4000	65	U	20,000	20,000	295	118	6
1000*	V250H245	E40	MVR1000/U/40	41828	108000	4000	65	U	12,000	12,000	385	178	6

\*when used VBU or VBD ±15°

### Multi-Vapor™ Elliptical Diffuse

250	133	E40	MVR250/C/U/40	44543	19800	3900	70	U	10,000	10,000	216	89	12
400*	135	E40	MVR400/C/U/40	43908	35000	3700	70	U	20,000	20,000	295	118	6

### Multi-Vapor™ High Output Elliptical Clear

400	135	E40	MVR400/VBU/40	49860	41000	4000	65	VBU±15°	20,000	-	295	118	6
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### Multi-Vapor™ High Output Elliptical Diffuse

400	135	E40	MVR400/C/VBU/40	49857	38000	3700	70	VBU±15°	20,000	-	295	118	6
400*	135	E40	MPR400/C/VBU/0/40	27738	38000	3200	70	VBU±15°	20,000	-	292	118	6

Operating from CWA control gear. Initial lumen values and Rated Average Life based on vertical orientation for Universal types. Multi-Vapor™ lamps must operated in fully enclosed fixtures except those marked \*when used VBU or VBD +/-15°.

For lamps requiring enclosed fixtures, lens/diffuser material must be able to contain fragments of hot quartz or glass (upto 1100°C). Lamps operated in the vertical position that are not designated "Enclosed Fixtures only" lamp may be used in an open or enclosed lighting fixture depending upon the application and operating environment. For example, if the lamp is located near combustible material or in an area which is unoccupied for extended periods, an enclosed fixture which can contain fragments of hot quartz or glass is recommended. For more information contact your fixture manufacturer.

### Kolorarc™ Tubular Clear

400	130	E40	KRC400/T/H/960/E40	30052	25000	6000	90	HOR±45°	-	10,000	270	58	12
400	130	E40	KRC400/T/VBU/960/E40	30704	28000	6000	90	BU±45°	10,000	-	270	58	12

### Kolorarc™ Elliptical Clear

400	135	E40	KRC400/E/VBU/645/E40	16871	30500*	4500	65	BU±30°	14,000	-	286	122	10
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### Kolorarc™ Elliptical Diffuse

400	135	E40	KRC400/D/VBU/740/E40	16872	32000*	4000	70	BU±30°	14,000	-	286	122	10
400	135	E40	KRC400/D/H/740/E40	16875	32000	4000	70	HOR±15°	-	14,000	286	120	10
400	130	E40	KRC400/D/VBU/960/E40	10837	26000	6000	90	BU±45°	10,000	-	282	121	6
400	130	E40	KRC400/D/H/960/E40	10834	24000	6000	90	HOR±45°	-	10,000	282	121	6

Operating from suitable mercury or metal halide ballast rated 3.5A and metal halide ignitor. Low loss ballast recommended for 400W 6000K (960) products - see lamp data sheet for details. \*Enhanced lumen performance operating from special "High Output" ballast rated 3.8A - see lamp data sheet for details. Kolorarc™ lamps are only suitable for operation in fully enclosed fixtures where lens/diffuser material must be able to contain fragments of hot quartz or glass (upto 1100°C)

### Sportlight™ Linear

1500	270	RX75M	SPL1500/L/H/652/Rx75M	16920	120000	5200	65	HOR±15°	-	6,000	256	22	1
2000	250	spec.	SPL2000/L/H/654	16922	200000	5200	65	HOR±15°	-	6,000	311	26	1

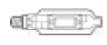
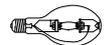
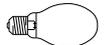
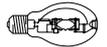
### Sportlight™ Tubular Clear

1000	120±10	E40	SPL1000/T/H/960/E40 1/4	88882	80000	6000	93	HOR±60°	-	8,000	340	81	4
2000	250	E40	SPL2000/T/H/960/E40	30102	170000	6000	93	HOR±60°	-	5,000	430	101.5	4

### Sportlight™ Internal Ignitor

2000	250	E40	SPL2000/I/T/H/640/E40	33148	190000	4000	65	HOR±75°	-	2,000	430	101	4
2000	250	E40	SPL2000/I/T/H/960/E40	30103	170000	6000	93	HOR±60°	-	5,000	430	101	4

Please refer to technical data sheet for appropriate ballast and ignitors. Sportlight™ lamps are only suitable in fully enclosed fixtures, where fixture lens/diffuser material must be able to contain fragments of hot quartz or glass (up to 1100° C)



# High Intensity Discharge Lamps

## High Pressure Sodium Lamps

Wattage [W]	Volts [V]	Cap	Product Description	Product Code	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Rated Life [h]	Length [mm]	Diameter [mm]	Pack Qty
<b>Lucalox™ XO Tubular Clear</b> ▲												
50	85	E27	LU50/85/XO/T/27	93373	4400	2100	25	U	28,500	156	38.5	25
70	90	E27	LU70/90/XO/T/27	93375	6600	2100	25	U	33,000	156	38.5	25
100	100	E40	LU100/100/XO/T/40	93376	10700	2100	25	U	35,000	211	48	12
150	100	E40	LU150/100/XO/T/40	93377	17500	2100	25	U	35,000	211	48	12
250	100	E40	LU250/XO/T/40	93378	33000	2100	25	U	32,000	260	48	12
400	100	E40	LU400/XO/T/40	93269	56500	2100	25	U	32,000	283	48	12
600	115	E40	LU600/XO/T/40	93270	90000	2100	25	U	32,000	283	48	12



<b>Lucalox™ XO Elliptical Diffuse</b> ▲												
50	85	E27	LU50/85/XO/D/27	45696	3600	2100	25	U	28,500	156	72	12
70	90	E27	LU70/90/XO/D/27	45697	6000	2100	25	U	33,000	156	72	12
100	100	E40	LU100/100/XO/D/40	93379	10200	2100	25	U	35,000	186	76	12
150	100	E40	LU150/100/XO/D/40	93380	16900	2100	25	U	35,000	227	91	12
250	100	E40	LU250/XO/D/40	93381	31200	2100	25	U	32,000	227	91	12
400	105	E40	LU400/XO/D/40	93296	54000	2100	25	U	32,000	282	122	6



<b>Lucalox™ XO Superlife Tubular Clear</b> ▲												
50	85	E27	LU 50/XO/SBY/T/E27	78736	4400*	2000	25	U	40,000	156	38.5	25
70	90	E27	LU 70/XO/SBY/T/E27	88258	6600	2000	25	U	50,000	156	38.5	25
100	100	E40	LU 100/XO/SBY/T/E40	88256	10700	2000	25	U	60,000	211	48	12
150	100	E40	LU 150/XO/SBY/T/E40	78737	17500*	2000	25	U	60,000	211	48	12
250	100	E40	LU 250/XO/SBY/T/E40	78738	33000*	2000	25	U	55,000	260	48	12
400	100	E40	LU 400/XO/SBY/T/E40	78739	55800*	2000	25	U	55,000	283	48	12

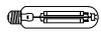


\* Provisional Data

<b>Lucalox™ XO Superlife Elliptical Diffuse</b> ▲												
70	90	E27	LU 70/XO/SBY/D/E27	88257	6000	2000	25	U	50,000	156	71	12
100	100	E40	LU 100/XO/SBY/D/E40	88255	10000	2000	25	U	60,000	186	75	12



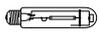
<b>Lucalox™ Superlife Tubular Clear</b> ▲												
50	85	E27	LU50/85/MO/SBY/T/E27	88558	3400	2000	25	U	40,000	156	38.5	25
70	90	E27	LU70/90/MO/SBY/T/E27	88268	6000	2000	25	U	40,000	156	38.5	25
100	100	E40	LU100/100/MO/SBY/T/40	17899	9600	2000	25	U	50,000	211	48	12
150	100	E40	LU150/100/SBY/T/40	35594	15000	2000	25	U	50,000	211	48	12
250	100	E40	LU250/SBY/T/40	35586	27500	2000	25	U	55,000	260	48	12
400	100	E40	LU400/SBY/T/40	35582	50000	2000	25	U	55,000	283	48	12



<b>Lucalox™ Superlife Elliptical Diffuse</b> ▲												
50	85	E27	LU50/85/MO/SBY/D/E27	88557	3300	2000	25	U	40,000	156	72	12
70	90	E27	LU70/90/MO/SBY/D/E27	88269	5800	2000	25	U	40,000	156	72	12
150	100	E40	LU150/100/SBY/D/40	35589	14500	2000	25	U	50,000	227	91	12
250	100	E40	LU250/SBY/D/40 w	35590	26000	2000	25	U	55,000	227	91	12
400	105	E40	LU400/SBY/D/40	35591	47500	2000	25	U	55,000	282	122	6



<b>Lucalox™ Standard Tubular Clear</b> ▲												
50	85	E27	LU50/85/MO/T/E27 1/25	88553	3400	2000	25	U	28,500	156	38.5	25
70	90	E27	LU 70/90/MO/T/E27 1/25	46221	6000	2000	25	U	28,500	156	38.5	25
100	100	E40	LU100/100/MO/T/40	93767	9600	2000	25	U	28,500	211	48	12
150	100	E40	LU150/100/40	44244	15000	2000	25	U	28,500	211	48	12
250	100	E40	LU250/T/40	22453	27500	2000	25	U	28,500	260	48	12
400	100	E40	LU400/T/40	11678	48000	2000	25	U	28,500	283	48	12
1000	110	E40	LU1000/110/T/40 4pk	45751	130000	2000	25	U	24,000	372	67	4



▲ External Ignitor ▲ Internal Ignitor



Wattage [W]	Volts [V]	Cap	Product Description	ProductCode	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Rated Life [h]	Length[mm]	Diameter [mm]	Pack Qty
<b>Lucalox™ Standard Elliptical Diffuse</b>												
50	85	E27	LU50/85/MO/D/E27 1/25	88554	3300	2000	25	U	28,500	156	72	12
70	90	E27	LU 70/90/MO/D/E27 1/12	46217	5800	2000	25	U	28,500	156	72	12
100	100	E40	LU100/100/MO/D/40	93766	9200	2000	25	U	28,500	186	76	12
150	100	E40	LU150/100/D/40	44245	14500	2000	25	U	28,500	227	91	12
250	100	E40	LU250/D/40	44052	26000	2000	25	U	28,500	227	91	12
400	100	E40	LU400/D/40	44057	47500	2000	25	U	28,500	282	122	6
1000	110	E40	LU1000/110/D/40	30228	120000	2000	25	U	24,000	372	162	1



<b>Lucalox™ Internal Ignitor Elliptical Clear</b>												
70	90	E27	LU 70/90/MO/I/E27 1/12	46209	6000	2000	25	U	12,000	156	72	12



<b>Lucalox™ Internal Ignitor Elliptical Diffuse</b>												
50	85	E27	LU50/85/MO/D/I/E27 1/12	88556	3300	2000	25	U	12,000	156	72	12
70	90	E27	LU70/90/MO/D/I/E27 1/12	46186	5800	2000	25	U	12,000	156	72	12



<b>Lucalox™ TD Double Ended</b>												
250	100	RX7s-24	LU250/TD	30241	23000	2000	25	HOR±20°	20,000	191	22.4	10
400	100	RX7s-24	LU400/TD	30244	43000	2000	25	HOR±20°	20,000	256	22.4	10
1000	250	RX7s-24	LU1000/TD	30246	137000	2000	25	HOR±20°	20,000	334	22.4	10



<b>Lucalox™ E-Z Lux™ Elliptical Diffuse – Mercury Retrofit</b>												
110	110	E27	LUH110/D/27-SHx	39512	8000	2000	25	U	24,000	175	72	40



External Ignitor Internal Ignitor

<b>Lucalox™ PSL (PhotoSynthesis Light) Tubular Clear</b>												
250	115	E40	LU250W/PSL/T/E40	88665	33000	2100	22	U	10000	283	48	12
400	110	E40	LU400W/PSL/T/E40	17106	56500	2100	22	U	12,000*	283	48	12
400	110	E40	LU400W/PSL/T/E40/Bulk	44304	56500	2100	22	U	12,000*	283	48	63
600	115	E40	LU600W/PSL/T/E40	17107	90000	2100	22	U	12,000*	283	48	12
600	115	E40	LU600W/PSL/T/E40/Bulk	44305	90000	2100	22	U	12,000*	283	48	63
750	115	E40	LU750W/PSL/T/E40	17108	112000	2100	22	U	10,000*	293	51	12
750	115	E40	LU750W/PSL/T/E40/Bulk	44306	112000	2100	22	U	10,000*	293	51	63
600	115	E40	LU400V/600W/PSL/T/E40	43440	90000	2100	22	U	12,000*	283	48	12
600	115	E40	LU400V/600W/PSL/T/E40/Bulk	43439	90000	2100	22	U	12,000*	283	48	63
750	115	E40	LU400V/750W/PSL/T/E40	43438	112000	2100	22	U	12,000*	293	51	12
750	115	E40	LU400V/750W/PSL/T/E40/Bulk	43437	112000	2100	22	U	12,000*	293	51	63



\*90%reliability External Ignitor Internal Ignitor



# High Intensity Discharge Lamps

## High Pressure Mercury Lamps

Wattage [W]	Volts [V]	Cap	Product Description	ProductCode	Lumen [lm]	CCT [K]	CRI [Ra]	Operating position	Rated Life [h]	Length[mm]	Diameter [mm]	Pack Qty
<b>Kolorlux™ Mercury Standard</b>												
50	95	E26	H50/27 1/24	74171*	1800	4000	45	U	16,000	130	56	24
80	115	E27	H80/27 1/24	74172	3800	4000	40	U	20,000	166	71	24
80	115	B22	H80/B22 1/24	74173	3800	4000	40	U	20,000	166	71	24
125	125	E27	H125/27 1/24	73736	6300	4000	40	U	20,000	178	76	24
125	125	B22	H125/B22 1/24	77071	6300	4000	40	U	20,000	178	76	24
250	130	E40	H250/40 1/12	73737	13000	4000	40	U	20,000	227	91	12
400	135	E40	H400/40 1/12	74174	22500	4000	40	U	20,000	292	122	12



## Kolorlux™ Mercury Deluxe

50	95	E27	H50 DX E27 1/24	77055*	1800	3700	53	U	16,000	130	56	24
80	115	E27	H80 DX E27 1/24	77056	3800	3600	54	U	20,000	166	71	24
125	125	E27	H125NDX E27 1/24	77057	6600	3500	52	U	20,000	178	76	24
250	130	E40	H250NDX E40 1/12	77058	13800	3400	50	U	20,000	228	91	12
400	135	E40	H400 DX E40 1/12	77061	24400	3400	47	U	20,000	292	122	12



\*Estimated launch April 2010. The data shown is target performance data.

## Mixed Light

160	230-240	E27	ML 230-240V 160W E27	96724	3100	4200	52	VB $\pm$ 30°	8,000	170	76	24
160	230-240	B22	ML 230-240V 160W B22	96727	3100	4200	52	VB $\pm$ 30°	8,000	170	76	24
160	240-250	E27	ML 240-250V 160W E27	96728	3100	4200	52	VB $\pm$ 30°	8,000	170	76	24
250	230-240	E27	ML 230-240V 250W E27	96725	5600	3800	52	U	8,000	227	91	12
250	230-240	E40	ML 230-240V 250W E40	96723	5600	3800	52	U	8,000	227	91	12
250	240-250	E40	ML 240-250V 250W E40	96726	5600	3800	52	U	8,000	227	91	12
500	230-240	E40	ML 230-240V 500W E40	96713	14000	3800	40	U	8,000	292	121	10



# Brand cross reference

The following pages show GE and alternative brand Order Codes. These cross references are provided as a quick guide and may only represent a near equivalent to other brands. The table contains data from alternative brands catalogues and website.

GE	OSRAM	PHILIPS
<b>ConstantColor CMH™</b>		
CMH20/TC/UVC/830/GU6.5	HCI-TF 20W/830 WDL PB GU6.5	CDM-Tm Mini PGJ5 20W/830*
CMH20/TC/UVC/U/830/G8.5 Plus	HCI-TC 20W/830 WDL PB G8.5	CDM-TC 20W/830 G8.5 1CT*
CMH35/T/UVC/930/GU6.5	-	CDM-Tm Mini PGJ5 35W/830
CMH35/T/UVC/942/GU6.5	-	-
CMH35/TC/UVC/U/830/G8.5 Plus	HCI-TC 35W/830 WDL PB G8.5	CDM-TC 35W/830 G8.5
CMH35/TC/UVC/U/942/G8.5	HCI-TC 35W/942 NDL PB UVS G8.5	CDM-TC 35W/942 G8.5
CMH35/TC/UVC/U/930/G8.5 ULTRA	-	CDM-T Elite 35W/930 G8.5 1CT*
CMH70/TC/UVC/U/830/G8.5 Plus	HCI-TC 70W/830 WDL PB G8.5	CDM-TC 70W/830 G8.5
CMH70/TC/UVC/U/942/G8.5	HCI-TC 70W/942 NDL PB G8.5	CDM-TC 70W/942 G8.5
CMH70/TC/UVC/U/930/G8.5 ULTRA	HCI-TC 70/930 WDL PB Shop G8.5*	CDM-TC Elite 70W/930 G8.5*
CMH20/T/UVC/U/830/G12 Plus	-	CDM-T 20W/830 G12 1CT*
CMH35/T/UVC/U/830/G12 Plus	HCI-T 35W/830 WDL PB G12	CDM-T 35W/830 G12
CMH35/T/UVC/U/942/G12	HCI-T 35W/942 NDL PB UVS G12	CDM-T 35W/942 G12
CMH35/T/UVC/U/930/G12 ULTRA	-	CDM-T Elite 35W/930 G12 1CT*
CMH70/T/UVC/U/830/G12	HCI-T 70W/830 WDL PB G12	CDM-T 70W/830 G12
CMH70/T/UVC/U/942/G12	HCI-T 70W/942 NDL PB UVS G12	CDM-T 70W/942 G12
CMH70/T/UVC/U/930/G12 ULTRA	HCI-TC 70/930 WDL PB Shop G12	CDM-T Elite 70W/930 G12*
CMH150/T/UVC/U/830/G12	HCI-T 150W/830 WDL PB G12	CDM-T 150W/830 G12
CMH150/T/UVC/U/942/G12	HCI-T 150/NDL PB UVS G12	CDM-T 150W/942 G12
CMH35/TD/UVC/830/Rx7s	-	-
CMH70/TD/UVC/830/Rx7s	HCI-TS 70W/830 WDL PB UVS RX7S	CDM-TD 70W/830 RX7s
CMH70/TD/UVC/942/Rx7s	HCI-TS 70W/942 NDL PB UVS RX7S	CDM-TD 70W/942 RX7s
CMH150/TD/UVC/830/Rx7s-24	HCI-TS 150W/830 WDL PB RX7S-24	CDM-TD 150W/830 RX7s-24
CMH150/TD/UVC/942/Rx7s-24	HCI-TS 150W/942 NDL PB RX7S-24	CDM-TD 150W/942 RX7s-24
CMH20/MR16/UVC/830/GX10/SP12	HCI-R16 20/830 WDL PB 12D	MASTERColour CDM-R Mini 20W/830 GX10 MR16 10D 1CT
CMH20/MR16/UVC/830/GX10/FL25	HCI-R16 20/830 WDL PB 24D	MASTERColour CDM-R Mini 20W/830 GX10 MR16 25D 1CT
CMH20/MR16/UVC/830/GX10/WFL40	HCI-R16 20/830 WDL PB 40D	MASTERColour CDM-R Mini 20W/830 GX10 MR16 40D 1CT
CMH35/MR16/UVC/930/GX10/SP12	-	-
CMH35/MR16/UVC/930/GX10/FL25	-	-
CMH35/MR16/UVC/930/GX10/WFL40	-	-
CMH35/MR16/UVC/942/GX10/SP12	-	-
CMH35/MR16/UVC/942/GX10/FL25	-	-
CMH35/MR16/UVC/942/GX10/WFL40	-	-
CMH20/PAR20/UVC/830/E27/SP10	-	-
CMH20/PAR20/UVC/830/E27/FL25	-	-
CMH35/PAR20/830/E27/SP10	HCI-PAR20 35W/830 WDL SP E27	CDM-R 35W/830 E27 PAR20L10D
CMH35/PAR20/830/E27/FL25	HCI-PAR20 35W/830 WDL FL E27	CDM-R 35W/830 E27 PAR20L30D
CMH35/PAR20/UVC/942/E27/SP10	HCI-PAR20 35W/942 NDL PB SP 10D	CDM-R 35W/9420 E27 PAR20L30D
CMH35/PAR20/UVC/942/E27/FL25	HCI-PAR20 35W/942 NDL PB SP 30D	CDM-R 35W/942 E27 PAR20L30D
CMH20/PAR30/UVC/830/E27/SP10	HCI-PAR30 20W/830 WDL SP E27	-
CMH20/PAR30/UVC/830/E27/FL25	HCI-PAR30 20W/830 WDL FL E27	-
CMH35/PAR30/UVC/830/E27/SP10	HCI-PAR30 35W/830 WDL SP E27	CDM-R 35W/830 E27 PAR20L10D
CMH35/PAR30/UVC/830/E27/FL25	HCI-PAR30 35W/830 WDL FL E27	CDM-R 35W/830 E27 PAR20L30D
CMH35/PAR30/UVC/942/E27/SP10	HCI-PAR30 35W/942 NDL PB SP 10D	-
CMH35/PAR30/UVC/942/E27/FL25	HCI-PAR30 35W/942 NDL PB SP 30D	-
CMH70/PAR30/UVC/830/E27/SP15	HCI-PAR30 70W/830 WDL SP E27	CDM-R 70W/830 E27 PAR30L10D
CMH70/PAR30/UVC/830/E27/FL40	HCI-PAR30 70W/830 WDL FL E27	CDM-R 70W/830 E27 PAR30L40D
CMH70/PAR30/UVC/942/E27/FL15	HCI-PAR30 70W/942 NDL PB SP 10D	CDM-R 70W/942 E27 PAR30L10D
CMH70/PAR30/UVC/942/E27/SP40	HCI-PAR30 70W/942 NDL PB FL 30D	CDM-R 70W/942 E27 PAR30L40D
CMH70/E/UVC/U/830/E27/C	HCI-E/P 70/830 WDL PB E27 clear	CDM-ET 70W /830 E27
CMH100/E/UVC/U/830/E27/C	HCI-E/P 100/830 WDL PB clear	CDM-ET 100W /830 E40
CMH150/UVC/O/U/942/E27/C	HCI-E/P 150W/942 NDL PBMO CL E27	-
CMH70/E/UVC/U/830/E27/D	HCI-E/P 70W/830 NDL PB COE27	CDO-ET Coated 70W/828 E27
CMH70/UVC/O/U/940/E27/D	HCI-E/P 70W/942 NDL Coated E27	-
CMH100/E/UVC/U/830/E27/D	HCI-E/P 100W/830 WDL PB Coated E27	CDO-ET Coated 100W/828 E40
CMH150/UVC/O/U/940/E27/D	HCI-E/P 150W/942 NDL PB MO E27	CDO-ET Coated 150W/828 E40
CMH250/E/UVC/U/830/E40/D	HCI-E 250W/830 WDL PB E40	-
CMH400/E/UVC/U/830/E40/D	-	-



# High Intensity Discharge Lamps

GE	OSRAM	PHILIPS	Havells Sylvania
<b>ConstantColor CMH™</b>			
CMH70/TT/UVC/830/E27	HCI-T/P 70W/830 WDL PB E27	CDO-TT 70W /828 E27*	-
CMH100/TT/UVC/830/E40	-	CDO-TT 100W /828 E27*	-
CMH150/TT/UVC/830/E40	HCI-T/P 150W/830 WDL PB E40	CDO-TT 150W/828 E40*	-
CMH150/UVC/T/U/842/E40	-	CDO-TT 150W/828 E40*	-
CMH150/UVC/O/T/U/830/E40	HCI-T/P 150W/830 NDL PB E40	-	-
CMH150/T/UVC/O/U/942/E40	HCI-T/P 150W/942 NDL PB E40	-	-
CMH250/TT/UVC/U/830/E40	HCI-T 250W/830 WDL PB E40	CDO-TT 250W /828 E27	-
KRC250/CMH/830/T/H/E40	-	-	-
CMH400/TT/UVC/U/830/E40	-	-	-
<b>Arcstream™</b>			
ARC70/T/U/730/G12	HQI T 70/WDL	MHN-T70W/830	HSI-T 70W/WDL
ARC70/T/U/842/G12	HQI T 70/NDL	MHN-T70W/942	HSI-T 70W/NDL
ARC150/G12/830	-	-	-
ARC150/G12/842	-	-	-
ARC70/UVC/TD/730/Rx7s	HQI TS 70/WDL UVS	MHW-TD70W	HSI-TD 75W/WDL 3K UVS
ARC70/UVC/TD/742/Rx7s	HQI TS 70/NDL UVS	MHN-TD70W	HSI-TD 75W/NDL 4K UVS
ARC150/UVC/TD/732/Rx7s-24	HQI TS 150/WDL UVS	MHW-TD150W	HSI-TD 150W/WDL 3K UVS
ARC150/UVC/TD/742/Rx7s-24	HQI TS 150/NDL UVS	MHN-TD150W	HSI-TD 150W/NDL 4K UVS
ARC150/TD/952/Rx7s-24	-	-	-
ARC150/UVC/AQUA/TD/865/Rx7s-24	-	-	-
ARC250/TD/832/Fc2	HQI TS 250/WDL UVS	MHW-TD250W	HSI-TD 250W/NDL 3K UVS
ARC250/TD/842/Fc2	HQI TS 250/NDL UVS	MHN-TD250W	HSI-TD 250W/NDL 4K UVS
ARC150/UVC/TD/GREEN/RX7S-24	-	-	-
ARC150/UVC/TD/BLUE/RX7S-24	-	-	-
ARC150/UVC/TD/ORANGE/RX7S-24	-	-	-
ARC150/UVC/TD/MAGENTA/RX7S-24	-	-	-
ARC250/T/VBU/960/E40	HQI-T 250/D	-	-
ARC250/T/H/960/E40	-	-	-
ARC400/T/H/742/E40	-	-	-
ARC250/D/H/740/E40	-	-	-
ARC250/D/H/960/E40	HQI-E 250/D	-	-
ARC250/D/VBU/960/E40	HQI-E 250/D	CDO-TT 100W /828 E27*	-
<b>Kolorarc™</b>			
KRC400/T/H/960/E40	-	-	-
KRC400/T/VBU/960/E40	-	-	-
KRC400/E/VBU/645/E40	-	-	HSI-T 400W/4K
KRC400/D/VBU/740/E40	-	-	-
KRC400/D/H/740/E40	-	-	-
KRC400/D/VBU/960/E40	-	-	-
KRC400/D/H/960/E40	-	-	-
<b>Multi-vapor™</b>			
MVR250/U/40	-	-	-
MVR400/U/40	-	-	-
MVR1000/U/40	-	-	-
MVR250/C/U/40	-	-	-
MVR400/C/U/40	-	-	-
MVR400/VBU/40	-	-	-
MVR400/C/VBU/40	-	-	HSI-MP 400W/C/BU
MPR400/C/VBU/0/40	-	-	-
<b>Sportlight™</b>			
SPL1500/L/H/652/Rx7SM	-	-	-
SPL2000/L/H/654	-	-	-
SPL2000/T/H/960/E40	HQI-T 2000/D	MASTER HPI-T PRO /646	-
SPL2000/I/T/H/640/E40	HQI-T 2000 /N	MASTER HPI-T PRO /646	-
SPL2000/I/T/H/960/E40	HQI-T 2000 /D/I	-	-
SPL1000/T/H/960/E40 1/4	-	-	-
<b>Blended Light</b>			
ML 160/230-240V E27	HWL 160 235V	ML 160W ES 235-245	HSB-BW 160W 240V E27
ML 160/230-240V B22	-	ML 160W B22 235-245	-
ML 160/240-250V	-	-	-
ML 250/230-240V E40	HWL 250 235V	ML 250W ES 235-245 E40	HSB-BW 250W 240V E40
ML 250/230-240V E27	-	ML 250W ES 235-245 E27	-
ML 250/ 240-250V E40	-	-	-
ML 500/230-240V E40	HWL 500 235V	ML 500W ES 235-245 E40	HSB-BW 500W 240V E40

\*Similar type. Information is gathered from relevant official web sites as of October, 2009



# Brand cross reference

GE	OSRAM	PHILIPS	Havells Sylvania
<b>Lucalox™ Standard</b>			
LU50/85/D/27	NAV-E 50/E	SON Pro 50W E	SHP 50W/CO-E
LU70/90/D/27	NAV-E 70/E	SON Pro 70W E	SHP 70W/CO-E
LU100/100/MO/D/40	NAV-E 100	SON Pro 100W E	SHP 100W
LU150/100/D/40	NAV-E 150	SON Pro 150W E	SHP 150W
LU250/D/40	NAV-E 250	SON Pro 250W E	SHP 250W
LU400/D/40	NAV-E 400	SON Pro 400W E	SHP 400W
LU1000/110/D/40	NAV-E 1000	SON Pro 1000W E	-
LU50/85/T/27	-	-	-
LU70/90/T12/27	NAV-T 70	SON- T Pro 70W	SHP-T 70W
LU100/100/MO/T/40	NAV-T 1000	SON- T Pro 100W	-
LU150/100/T /40	NAV-T 150	SON-T Pro 150W	SHP-T 150W
LU250/T/40	NAV-T 250	SON-T Pro 250W	SHP-T 150W
LU400/T/40	NAV-T 400	SON-T Pro 400W	SHP-T 400W
LU1000/110/T/40	NAV-T 1000	SON-T Pro 1000W	SHP-T 1000W
<b>Lucalox™ XO</b>			
LU50/85/XO/D/27	-	-	-
LU70/90/XO/D/27	-	MASTER SON PIA PLUS 70W	-
LU100/100/XO/D/40	NAV-E 100 SUPER 4Y	-	-
LU250/XO/D/40	NAV-E 250 SUPER 4Y	MASTER SON PIA PLUS 250W	-
LU400/XO/D/40	NAV-E 400 SUPER 4Y	MASTER SON PIA PLUS 400W	-
LU50/85/XO/T/27	NAV-T 50 SUPER 4Y	MASTER SON-T PIA PLUS 50W	-
LU70/90/XO/T/27	NAV-T 70 SUPER 4Y	MASTER SON-T PIA PLUS 70W	-
LU100/100/XO/T/40	NAV-T 100 SUPER 4Y	MASTER SON-T PIA PLUS 100W	-
LU150/150/XO/T/40	NAV-T 150 SUPER 4Y	MASTER SON-T PIA PLUS 150W	-
LU250/XO/T/40	NAV-T 250 SUPER 4Y	MASTER SON-T PIA PLUS 250W	-
LU400/XO/T/40	NAV-T 400 SUPER 4Y	MASTER SON-T PIA PLUS 400W	-
LU600/XO/T/40	NAV-T 600 SUPER 4Y	MASTER SON-T PIA PLUS 600W	-
<b>Lucalox™ I</b>			
LU50/85/D/I/27	NAV-E 50/I	SON Pro 50W I	SHP 50W/CO-I
LU70/90/D/I/27	NAV-E 70/I	SON Pro 70W I	SHP 70W/CO-I
LU70/90/I/27	-	SON Pro70W I CLEAR	SHP 70W/CL-I
<b>Lucalox™ E-Z lux</b>			
LUH110/D/27 - SHx	NAV-E 110	SON-H Pro 110W	SHx 110W E27
<b>Lucalox™ TD</b>			
LU250/TD	NAV-TS 250	-	-
LU400/TD	NAV-TS 400	-	-
LU1000/TD	-	-	-
<b>Lucalox™ SUPERLIFE</b>			
LU50/85/SBY/T/27	-	-	-
LU70/90/SBY/T/27	-	-	-
LU70/90/XO/SBY/T12/E27	-	-	SHP-TS 70w Twinarc
LU100/100/SBY/T/40	-	-	-
LU100/100/XO/SBY/T/E40	-	-	SHP-TS 100w Twinarc
LU150/100/SBY/T/40	-	-	SHP-T 150W SBY
LU250/SBY/T/40	-	-	SHP-T 250W SBY
LU400/SBY/T/40	-	-	SHP-T 400W SBY
LU50/85/SBY/D/27	-	-	-
LU70/90/SBY/D/27	-	-	SHP 70W SBY
LU70/90/XO/SBY/D/E27	-	-	SHP-S 70w Twinarc
LU100/100/XO/SBY/D/E40	-	-	SHP-S 100w Twinarc
LU150/100/SBY/D/40	-	-	SHP 150W SBY
LU250/SBY/D/40	-	-	SHP 250W SBY
LU400/SBY/D/40	-	-	SHP 400W SBY
<b>Kolorlux Standard</b>			
H125/27	HQL 125	HPL-N 125W	HSL-BW 125W E27
H250/40	HQL 250	HPL-N 250W	HSL-BW 250W E40

