

## 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

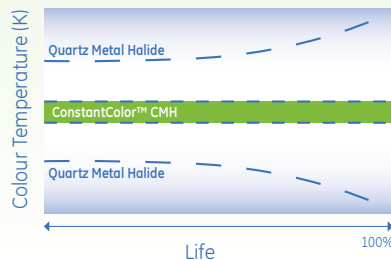
### Energy Saving



#### 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

GE's miniature CMH lamps have created new possibilities for lighting designers. Combining the power and light quality of far larger lamps from a tiny capsule, they have made it possible to achieve lighting designs that could previously only be achieved with less efficient tungsten halogen.



### 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



### 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 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 next 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

- GE has developed 70W 3000K CMH lamps in both G12 and G8.5 formats. These lamps match the 70W 4000K standard CMH lamps CRI performance
- 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 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 70W G12 and CMH 70W 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 Ultra 70W

#### Next Generation of CMH Lamps

- More usable light over life, 33% more lumen output at end of life vs. standard CMH lamps
- CMH Ultra G8.5 and G12 lamps offer excellent 930 colour



### CMH Mini & G12

#### Performance Upgrade

- Extends 20W, 35W and 70W 3000K lamps' life up to 15,000 hours
- Improved reliability



### CMH Supermini

#### Improved Versatility

- Allows miniaturisation of fixtures (only 52mm long)
- Available in 20W and NEW 35W versions
- 35W available in 930 & 942 colours



### 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



### 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

#### Range Extension

- 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 & Elliptical 70-150W

#### 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

### 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 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

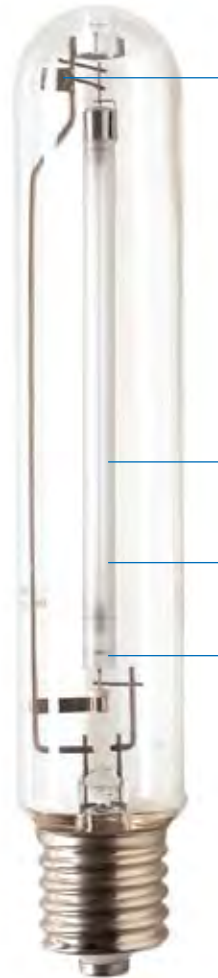
Lucalox™ XO lamps are of very robust and reliable construction, designed to meet the most demanding requirements. There are fewer parts and only 5 critical welds.

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

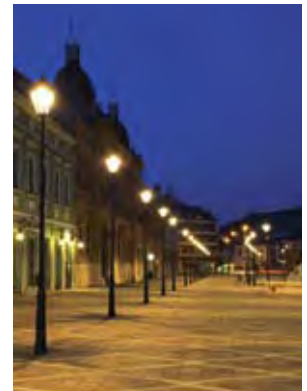


**Zirconium-Iron getter**  
Improves lumen maintenance


**GE reliable starting technology**  
Improves lumen maintenance

**Higher transparency ceramic**  
More light output


**Monolithic construction**  
More robust




# Selector



**Single Ended Mini Ultra**  
 Cap: G8.5  
 Wattages: 70W  
 Colours: 930  
 Life: 15,000Hrs  
 Page: 29




**Single Ended Minis**  
 Cap: G8.5  
 Wattages: 20-70W  
 Colours: 830, 942  
 Life: 12,000-15,000Hrs  
 Page: 29




**Single Ended Supermini**  
 Cap: G6.5  
 Wattages: 20-35W  
 Colours: 830, 930, 942  
 Life: 10,000-12,000Hrs  
 Page: 29

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



**Single Ended Ultra**  
 Cap: G12  
 Wattages: 70W  
 Colours: 930  
 Life: 15,000Hrs  
 Page: 29




**Single Ended**  
 Cap: G12  
 Wattages: 20-150W  
 Colours: 830, 842, 942  
 Life: 12,000-15,000Hrs  
 Page: 29




**Double Ended**  
 Cap: RX7s or RX7s-24  
 Wattages: 35-150W  
 Colours: 830, 942  
 Life: 10,000-15,000Hrs  
 Page: 29

**CostantColor™ CMH (Ceramic Metal Halide) Reflectors**



**MR16**  
 Cap: GX10  
 Wattages: 20-35W  
 Colours: 830, 930, 942  
 Life: 10,000-12,000Hrs  
 Page: 30



**PAR20**  
 Cap: E27  
 Wattages: 20-35W  
 Colours: 830, 942  
 Life: 10,000-12,000Hrs  
 Page: 30




**PAR30**  
 Cap: G23  
 Wattages: 20-70W  
 Colours: 830, 942  
 Life: 10,000-13,000Hrs  
 Page: 30


**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: 30



**Open Rated Elliptical**  
 Cap: E27  
 Wattages: 70-150W  
 Colours: 940, 942  
 Finish: Clear or Diffuse  
 Life: 15,000Hrs  
 Page: 30



**Tubular**  
 Cap: E27, E40  
 Wattages: 70-400W  
 Colours: 830, 842, 942  
 Finish: Clear  
 Life: 10,000-24,000Hrs  
 Page: 31



**Open Rated Tubular**  
 Cap: E40  
 Wattages: 150W  
 Colours: 830, 942  
 Finish: Clear  
 Life: 12,000Hrs  
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**CMH Ballasts**



**CMH Ballasts**  
 A range of ballasts for 20 - 150W CMH lamps  
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# 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: 32



### Double Ended

Cap: G12  
Wattages: 150-250W  
Colours: 3000-5200K  
Cri: 80-85  
Life: 6,000Hrs  
Page: 32



### Double Ended Coloured

Cap: RX7s-24  
Wattages: 150W  
Colours: Green, Blue, Orange, Magenta  
Life: 6,000Hrs  
Page: 32

## 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: 32



### Tubular

Cap: E40  
Wattages: 250-400W  
Colours: 4200-6000K  
Cri: 70-90+  
Finish: Clear  
Life: 10,000Hrs  
Page: 32



### Standard - Elliptical

Cap: E40  
Wattages: 250-1000W  
Colours: 3700-4200K  
Cri: 65-70  
Finish: Clear or Diffuse  
Life: 10,000 -20,000Hrs  
Page: 33



### High Output - Elliptical

Cap: E40  
Wattages: 250-400W  
Colours: 3000-4000K  
Cri: 65-70  
Finish: Clear or Diffuse  
Life: 20,000Hrs  
Page: 33

## 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: 33



### Tubular

Cap: E40  
Wattages: 400W  
Colours: 6000K  
Cri: 90  
Finish: Clear  
Life: 10,000Hrs  
Page: 33

## Spotlight Metal Halide

For sports and floodlighting



### Linear

Cap: RX7s - spec  
Wattages: 1500-2000W  
Colours: 5200 - 5400K  
Cri: 65  
Life: 6,000Hrs  
Page: 33



### Tubular Clear

Cap: E40  
Wattages: 1000-2000W  
Colours: 6000K  
Cri: 93  
Life: 5,000 -8,000Hrs  
Page: 33



### Internal Ignitor

Cap: E40  
Wattages: 2000W  
Colours: 6000K  
Cri: 93  
Life: 5,000Hrs  
Page: 33

# Selector

## High Pressure Sodium



### Lucalox™

Cap: E27, E40  
Wattages: 50-1000W  
Finish: Tubular Clear or Elliptical Diffuse  
Life: 24,000 -28,500Hrs  
Page: 34-35



### 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: 34



### Lucalox™ PSL

Cap: E40  
Wattages: 400-750W  
Feature: Designed for Greenhouse lighting  
Finish: Tubular Clear  
Life: 12,000Hrs  
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## High Pressure Sodium – Others



### Lucalox™ TD

Cap: RX7s-24  
Wattages: 250-1000W  
Life: 20,000Hrs  
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### Lucalox™ E-Z Lux™

Cap: E27  
Wattages: 110W  
Feature: Direct replacement for mercury lamps  
Life: 16,000Hrs  
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### Lucalox™ Internal Ignitor

Cap: E27  
Wattages: 50-70W  
Feature: Internal ignitor  
Finish: Elliptical Clear or Diffuse  
Life: 12,000Hrs  
Page: 35

## Mercury Lamps



### Lucalox™ XO Superlife

Cap: E27, E40  
Wattages: 70-100W  
Feature: Extra high lumen output and Twin Arc tubes for extra life  
Finish: Tubular Clear or Elliptical Diffuse  
Life: 40,000 -55,000Hrs  
Page: 34



### 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  
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### Kolorlux Standard

Cap: E27, E40  
Wattages: 80-400W  
Life: 12,000-20,000Hrs  
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### Mixed Light

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

### 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 134-135 for cap drawings

**Nominal Volts:** Lamp data is based on operation at rated voltage

**Product description:** The lamp's identification code

**Lumens:** Initial Lumens - light output at 100 hours

**Life (Horizontal):** Rated average life in horizontal burning position

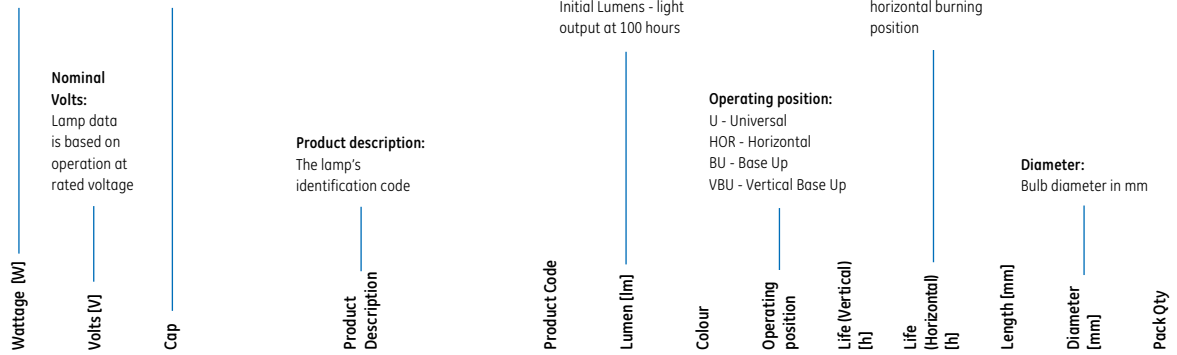
### Additional parameters:

#### 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.



## ConstantColor™ - CMH Ultra

70	95	G12	CMH70/T/UVC/U/930/G12 ULTRA	96752	6400	930	U	15,000	15,000	88	19	12
70	95	G8.5	CMH70/TC/UVC/U/930/G8.5 ULTRA	96751	6200	930	U	15,000	15,000	85	14.5	12

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

- (70)** Identifies Lamp's wattage
- (UVC)** UV Control
- (U)** Operating Position
- (T)** Identifies the lamp format.
  - TD - Double Ended
  - E - Elliptical Clear
  - D - Elliptical Diffused
  - L - Linear
  - PARxx - PAR + size
  - T - Tubular Clear
- (9)** Colour rendering
  - 6 - Ra 58 to 67 (Group 2B)
  - 7 - Ra 68 to 77 (Group 2A)
  - 8 - Ra 78 to 87 (Group 1B)
  - 9 - Ra 88 to 97 (Group 1A)
- (30)** Colour temperature
  - XX = First 2 digits of temperature in Kelvin - XX00K
  - Example: 30 is 3000K

**(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

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

**Length:** Lamp length in mm

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

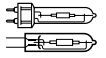
**Life (Vertical):** Rated average life in vertical burning position

**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 Ultra</b>												
70	95	G12	CMH70/T/UVC/U/930/G12 ULTRA	96752	6400	930	U	15,000	15,000	90	19	12
70	95	G8.5	CMH70/TC/UVC/U/930/G8.5 ULTRA	96751	6200	930	U	15,000	15,000	85	14.5	12



<b>ConstantColor™ - CMH Supermini</b>												
20	95	GU6.5	CMH20/TC/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	10,000*	10,000*	52	13	12
35	95	GU6.5	CMH35/T/UVC/942/GU6.5	88657	3400	942	U	12,000*	12,000*	52	13	12



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

<b>ConstantColor™ - CMH Single Ended 'MINI's</b>												
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 G8.5	43273	3400	830	U	15,000	15,000	85	14.5	12
35	90	G8.5	CMH35/TC/UVC/U/942/G8.5	26348	3200	942	U	12,000*	12,000*	85	14.5	12
70	90	G8.5	CMH70/TC/UVC/U/830/G8.5 PLUS G8.5	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



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

<b>ConstantColor™ - CMH Single Ended</b>												
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	15,000	15,000	90	14.5	12
35	90	G12	CMH35/T/UVC/U/942/G12	92141	3200	942	U	12,000*	12,000*	90	14.5	12
70	90	G12	CMH70/T/UVC/U/830/G12	20005	6400	830	U	15,000	15,000	90	19	12
70	90	G12	CMH70/T/UVC/U/942/G12	20013	6000	942	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



<b>ConstantColor™ - CMH Double Ended</b>												
35	90	RX7s	CMH35/TD/UVC/830/RX7s	43278	3400	830	HOR±45°	-	10,000*	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.

# 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	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.

<b>ConstantColor™ - CMH PAR 20</b>													
Wattage (W)	Volts (V)	Cap	Product Description	Product Code	Lumen (lm)	Beam Angle [°]	Colour	Operating position	Life (Vertical) (h)	Life (Horizontal) (h)	Length (mm)	Diameter (mm)	Pack Qty
20	95	E27	CMH20PAR20/UVC/830/E27/SP10	26478	13000	10	830	U	12,000	12,000	92	63	15
20	95	E27	CMH20/PAR20/UVC/830/E27/FL25	26481	3750	25	830	U	12,000	12,000	92	63	15
35	90	E27	CMH35/PAR20/UVC/830/E27/SP10	21684	22000	10	830	U	10,000	10,000	92	73	15
35	90	E27	CMH35/PAR20/UVC/942/E27/SP10	44890	19450	10	942	U	10,000	10,000	92	67	15
35	90	E27	CMH35/PAR20/UVC/830/E27/FL25	21685	7500	25	830	U	10,000	10,000	92	73	15
35	90	E27	CMH35/PAR20/UVC/942/E27/FL25	44919	6950	25	942	U	10,000	10,000	92	67	15

<b>ConstantColor™ - CMH PAR 30</b>													
Wattage (W)	Volts (V)	Cap	Product Description	Product Code	Lumen (lm)	Beam Angle [°]	Colour	Operating position	Life (Vertical) (h)	Life (Horizontal) (h)	Length (mm)	Diameter (mm)	Pack Qty
20	95	E27	CMH20PAR30/UVC/830/E27/SP10	26497	19800	10	830	U	12,000	12,000	121	97	6
20	95	E27	CMH20PAR30/UVC/830/E27/FL25	26518	4900	25	830	U	12,000	12,000	121	97	6
35	90	E27	CMH35/PAR30/UVC/830/E27/SP10	21689	39600	10	830	U	10,000	10,000	121	108	6
35	90	E27	CMH35/PAR30/UVC/830/E27/FL 25	21690	11000	25	830	U	10,000	10,000	121	108	6
35	90	E27	CMH35/PAR30/UVC/942/E27/SP10	44939	36700	10	942	U	10,000	10,000	121	97	6
35	90	E27	CMH35/PAR30/UVC/942/E27/FL25	44942	10200	25	942	U	10,000	10,000	121	97	6
70	90	E27	CMH70/PAR30/UVC/830/E27/SP15	21683	42800	15	830	U	13,000	13,000	121	108	6
70	90	E27	CMH70/PAR30/UVC/830/E27/FL40	21682	10000	40	830	U	13,000	13,000	121	108	6

Wattage (W)	Volts (V)	Cap	Product Description	Product Code	Lumen (lm)	Beam Angle [°]	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	830	U	15,000	15,000	138	54	6
100	102	E27	CMH100/E/UVC/U/830/E27/C	46191	9200	830	830	U	15,000	15,000	138	54	6
150	95	E27	CMH150/UVC/O/U/942/E27/C	43285	13200	942	830	U	15,000	15,000	138	55	12

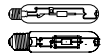
Wattage (W)	Volts (V)	Cap	Product Description	Product Code	Lumen (lm)	Beam Angle [°]	Colour	Operating position	Life (Vertical) (h)	Life (Horizontal) (h)	Length (mm)	Diameter (mm)	Pack Qty
<b>ConstantColor™ - CMH Elliptical Diffuse</b>													
70	97	E27	CMH70/E/UVC/U/830/E27/D	46187	6000	830	830	U	15,000	15,000	138	54	6
70	97	E27	CMH70/UVC/O/U/940/E27/D	43282	5300	940	830	U	15,000	15,000	138	54	6
100	102	E27	CMH100/E/UVC/U/830/E27/D	46194	8700	830	830	U	15,000	10,000	138	54	6
150	95	E27	CMH150/UVC/O/U/940/E27/D	43286	12300	940	830	U	15,000	15,000	138	55	12
250	117	E40	CMH250/E/UVC/U/830/E40/D	10591	23500	830	830	U	24,000	24,000	251	90	12
400	120	E40	CMH400/E/UVC/U/830/E40	13087	40000	830/836**	830	U	20,000	20,000	280	120	6

\*\* 830 in horizontal burning position, 836 in vertical burning position



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 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	12,000	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	12500	842	U	15,000	15,000	209	48	12
150	100	E40	CMH150/UVC/O/T/U/830/E40	21516	12900	830	U	12,000	12,000	209	48	12
150	100	E40	CMH150/UVC/O/T/U/942/E40	21517	12500	942	U	12,000	12,000	209	48	12
250	110	E40	KRC250/CMH/830/TT/H/E40	20302	20000	830	HOR	-	24,000	251	48	12
250	117	E40	CMH250/TT/UVC/U/830/E40	10589	25000	830	U	24,000	24,000	251	48	12
400	120	E40	CMH400/TT/UVC/U/830/E40	13067	42000	830/836**	U	20,000	20,000	270	60	12

\*\* 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	120	BLS/E/20W/CMHSMP	44879	Integral - Miniature	110	12
20	220-240	BLS/E/20W/CMHSMP	42387	Integral - Miniature	110	12
20	220-240	BLS/E/20W/CMHSMP/R	96804	Remote - Miniature	120	12
20	220-240	BLS/E/20W/CMH	13032	Integral	190	12
20	220-240	BLS/E/20W/CMH/R	13034	Remote	230	12
35	220-240	BLS/E/35W/CMH/R	13036	Remote	230	12
35	220-240	BLS/E/35W/CMH	73359	Integral	352	10
70	220-240	BLS/E/70W/CMH/R	13047	Remote	310	12
70	220-240	BLS/E/70W/CMH	73358	Integral	352	10
150	220-240	BLS/E/150W/CMH	13050	Integral	430	12
150	220-240	BLS/E/150W/CMH/R	13053	Remote	445	12
150	220-240	BLS/E/150W/CMH	73735	Integral	683	10



# 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
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
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### Arcstream™ Double Ended



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
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/UVC/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
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### Arcstream™ Double Ended Coloured



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
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### Arcstream™ Tubular Clear



250	112	E40	ARC250/T/H/742/E40	42357	21000	4200	70	HOR±15°	-	10,000	220	48	12
250	100	E40	ARC250/T/VBU/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

### Arcstream™ Elliptical Diffuse



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)

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*	V250 H245	E40	MVR1000/U/40	41828	105000	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	40000	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	37600	3700	70	VBU±15°	20,000	-	295	118	6
400*	135	E40	MPR400/C/VBU/O/40	27738	37600	3000	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 (up to 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 (up to 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

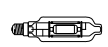
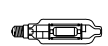
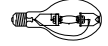
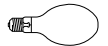
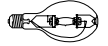
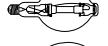
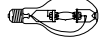
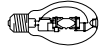
### Sportlight™ Tubular Clear

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	28,500	156	38.5	25
100	100	E40	LU100/100/XO/T/40	93376	10700	2100	25	U	32,000	211	48	12
150	100	E40	LU150/100/XO/T/40	93377	17500	2100	25	U	32,000	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




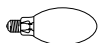
<b>Lucalox™ XO Elliptical Diffuse</b> 												
50	85	E27	LU50/85/XO/D/27	45696	3600	2100	25	U	28,500	156	72	12
70	90	E27	LU70/90/XO/D/27	45697	6000	2100	25	U	28,500	156	72	12
100	100	E40	LU100/100/XO/D/40	93379	10000	2100	25	U	32,000	186	76	12
150	100	E40	LU150/100/XO/D/40	93380	16900	2100	25	U	32,000	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




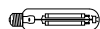
<b>Lucalox™ XO Superlife Tubular Clear</b> 												
70	90	E27	LU 70/XO/SBY/T/E27	88258	6600	2000	25	U	40,000	156	71	25
100	100	E40	LU 100/XO/SBY/T/E40	88256	10700	2000	25	U	55,000	211	75	12




<b>Lucalox™ XO Superlife Elliptical Diffuse</b> 												
70	90	E27	LU 70/XO/SBY/D/E27	88257	6000	2000	25	U	40,000	156	71	12
100	100	E40	LU 100/XO/SBY/D/E40	88255	10000	2000	25	U	55,000	186	75	12




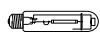
<b>Lucalox™ Superlife Tubular Clear</b> 												
50	85	E27	LU50/85/MO/SBY/T/E27	88558	3400	2000	25	U	40,000	156	38.5	25
70	90	E27	LU70/90/MO/SBY/T/E27	88268	6000	2000	25	U	40,000	156	38.5	25
100	100	E40	LU100/100/MO/SBY/T/40	17899	9600	2000	25	U	50,000	211	48	12
150	100	E40	LU150/100/SBY/T/40	35594	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	Product Code	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	8800	2000	25	U	16,000	175	72	40



 External Ignitor,  Internal Ignitor

<b>Lucalox™ PSL (PhotoSynthesis Light) Tubular Clear</b> 												
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 Pressure Mercury Lamps

<b>Kolorlux™ Mercury Standard</b>												
80	130	E27	H80/27 START	44182	3600	4000	40	U	12,000	166	71	24
125	140	E27	H125/27/1/24	73736	6300	4000	40	U	20,000	170	76	24
250	145	E40	H250/40 1/12	73737	13000	4000	40	U	20,000	227	91	12
400	150	E40	H400/40 START	45170	20000	4000	40	U	12,000	292	122	12



<b>Mixed Light</b>												
160	230-240	E27	ML 160/ 230-240V, E27	96724	3100	4200	52	VBU±30	8,000	170	76	24
160	230-240	B22	ML 160/ 230-240V, B22	96727	3100	4200	52	VBU±30	8,000	170	76	24
250	230-240	E27	ML 250/ 230-240V, E27	96725	5600	3800	52	U	8,000	227	91	12
250	230-240	E40	ML 250/ 230-240V, E40	96723	5600	3800	52	U	8,000	227	91	12
500	230-240	E40	ML 500/ 230-240V, E40	96713	14000	3800	40	U	8,000	292	121	10
160	240-250	E27	ML 160/ 240-250V, E27	96728	3100	4200	52	VBU±30	8,000	170	76	24
250	240-250	E40	ML 250/240-250V, E40	96726	5600	3800	52	U	8,000	227	91	12



# High Intensity Discharge Lamps

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/UJ/830/G8.5 Plus	HCI-TC 20W/830 WDL PB G8.5	-
CMH35/T/UVC/930/GU6.5	-	CDM-Tm Mini PGJ5 35W/830
CMH35/T/UVC/942/GU6.5	-	-
CMH35/TC/UVC/UJ/830/G8.5 Plus	HCI-TC 35W/830 WDL PB G8.5	CDM-TC 35W/830 G8.5
CMH35/TC/UVC/UJ/942/G8.5	HCI-TC 35W/942 NDL PB UVS G8.5	CDM-TC 35W/942 G8.5
CMH70/TC/UVC/UJ/830/G8.5 Plus	HCI-TC 70W/830 WDL PB G8.5	CDM-TC 70W/830 G8.5
CMH70/TC/UVC/UJ/942/G8.5	HCI-TC 70W/942 NDL PB G8.5	CDM-TC 70W/942 G8.5
CMH70/TC/UVC/UJ/930/G8.5 ULTRA	HCI-TC 70/930 WDL PB Shop G8.5*	CDM-TC Elite 70W/930 G8.5*
CMH20/T/UVC/UJ/830/G12 Plus	-	-
CMH35/T/UVC/UJ/830/G12 Plus	HCI-T 35W/830 WDL PB G12	CDM-T 35W/830 G12
CMH35/T/UVC/UJ/942/G12	HCI-T 35W/942 NDL PB UVS G12	CDM-T 35W/942 G12
CMH70/T/UVC/UJ/830/G12	HCI-T 70W/830 WDL PB G12	CDM-T 70W/830 G12
CMH70/T/UVC/UJ/942/G12	HCI-T 70W/942 NDL PB UVS G12	CDM-T 70W/942 G12
CMH70/T/UVC/UJ/930/G12 ULTRA	HCI-T 70/930 WDL PB Shop G12	CDM-T Elite 70W/930 G12*
CMH150/T/UVC/UJ/830/G12	HCI-T 150W/830 WDL PB G12	CDM-T 150W/830 G12
CMH150/T/UVC/UJ/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/SP	-	MASTERColour CDM-R Mini 20W/830 GX10 MR16 10D 1CT
CMH20/MR16/UVC/830/GX10/FL	-	MASTERColour CDM-R Mini 20W/830 GX10 MR16 25D 1CT
CMH20/MR16/UVC/830/GX10/WFL	-	MASTERColour CDM-R Mini 20W/830 GX10 MR16 40D 1CT
CMH35/MR16/UVC/930/GX10/SP	-	-
CMH35/MR16/UVC/930/GX10/FL	-	-
CMH35/MR16/UVC/930/GX10/WFL	-	-
CMH35/MR16/UVC/942/GX10/SP	-	-
CMH35/MR16/UVC/942/GX10/FL	-	-
CMH35/MR16/UVC/942/GX10/WFL	-	-
CMH20/PAR20/UVC/830/E27/SP	-	-
CMH20/PAR20/UVC/830/E27/FL	-	-
CMH35/PAR20/830/E27/SP	HCI-PAR20 35W/830 WDL SP E27	CDM-R 35W/830 E27 PAR20L10D
CMH35/PAR20/830/E27/FL	HCI-PAR20 35W/830 WDL FL E27	CDM-R 35W/830 E27 PAR20L30D
CMH35/PAR20/UVC/942/E27/SP10	-	CDM-R 35W/9420 E27 PAR20L30D
CMH35/PAR20/UVC/942/E27/FL25	-	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	-	-
CMH35/PAR30/UVC/942/E27/FL25	-	-
CMH70/PAR30/UVC/830/E27/SP	HCI-PAR30 70W/830 WDL SP E27	CDM-R 70W/830 E27 PAR30L10D
CMH70/PAR30/UVC/830/E27/FL	HCI-PAR30 70W/830 WDL FL E27	CDM-R 70W/830 E27 PAR30L40D
CMH70/E/UVC/UJ/830/E27/C	HCI-E/P 70/830 WDL PB E27 clear	CDM-ET 70W /830 E27
CMH100/E/UVC/UJ/830/E27/C	HCI-E/P 100/830 WDL PB clear	CDM-ET 100W /830 E40
CMH150/UVC/O/UJ/942/E27/C	HCI-E/P 150W/942 NDL PBMO CL E27	-
CMH70/E/UVC/UJ/830/E27/D	HCI-E/P 70W/830 NDL PB COE27	CDO-ET Coated 70W/828 E27
CMH70/UVC/O/UJ/940/E27/D	HCI-E/P 70W/942 NDL Coated E27	-
CMH100/E/UVC/UJ/830/E27/D	HCI-E/P 100W/830 WDL PB Coated E27	CDO-ET Coated 100W/828 E40
CMH150/UVC/O/UJ/940/E27/D	HCI-E/P 150W/942 NDL PB MO E27	CDO-ET Coated 150W/828 E40
CMH250/E/UVC/UJ/830/E40/D	HCI-E 250W/830 WDL PB E40	-
CMH400/E/UVC/UJ/830/E40/D	-	-



# Brand cross reference

GE	OSRAM	PHILIPS	SLI
<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 PBE40	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	-	-	-

\*Similar type

Information is gathered from relevant official web sites as of March, 2009



# High Intensity Discharge Lamps

GE	OSRAM	PHILIPS	SLI
<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
<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	-	-	-



# Brand cross reference

GE	OSRAM	PHILIPS	SLI
<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