



GE Lighting

*GE Lucalox[®]
High Pressure Sodium Lamps*



Why choose

GE Lucalox[®]
lamps offer low
operating costs,
long life and
energy efficient
performance.



THE INVENTORS OF LUCALOX TECHNOLOGY

The heart of a High Pressure Sodium lamp is the arc-tube, manufactured from transLUCent ALuminium OXide (LUCALOX) which was invented by GE in 1962.

From the launch of the original Lucalox range - the world's first high pressure sodium lamp - GE Lighting has led the way in this technology, offering specifiers and users every option to achieve long useful life, low operating costs and energy efficient performance.

GE Lucalox[®]

FOR APPLICATIONS OF ECONOMY AND QUALITY

Highest efficiency/lowest operating costs among
the High Intensity Discharge (HID) product
range with acceptable colour rendering

Long life of up to 28,500 hours offering
lower replacement and maintenance costs

More light for longer with over 90%
average maintenance lumens over life

Provides a warm
golden light

Shorter re-strike time than either metal
halide or mercury lamps

Starts and operates at temperatures
as low as -40°C,
with heat and shock resistant glass

Compact size - enables use of small
fixture lighting systems

Universal operating positions

Meets IEC 662 High Pressure
Sodium lamp standards

Fully interchangeable with other
High Pressure Sodium lamps

GE Lucalox[®]

High Pressure Sodium Lamps



GE quality & technology

CONSISTENT QUALITY

Lucalox lamps are manufactured to deliver consistent light quality, colour and light output from lamp to lamp throughout their long life. This consistency is checked using state of the art quality assurance procedures which ensure that each lamp performs within closely defined limits at all times in all stated operating conditions.



LONG LIFE WITH AMALGAM TECHNOLOGY

In conventional HPS lamps, sudden movement caused by high winds or traffic vibration can splash amalgam onto the lamp's electrodes, causing the lamp to 'blink out' and then re-start, which shortens the lamp's life. In Lucalox lamps, the amalgam reservoir is placed well away from the electrodes, reducing the risk of blink outs.

- GE Lucalox lamps with advanced amalgam technology provide up to 28,500 hours life (Average rated life).
- Lucalox lamps with advanced amalgam technology start out bright and stay brighter for longer.
- 90% lumen maintenance over life reducing re-lamping costs.



NICKEL ALLOY CAP

Manufactured from corrosion free nickel alloy, good electrical contact is maintained throughout life, and damaging moisture is minimised. This is vital in coastal areas where salt and moisture levels are high.

PERFORMANCE YOU CAN TRACK



GE Lucalox lamps have a unique datemarking feature allowing you to measure a lamp's performance over time and to calculate its remaining useful life. Each lamp base contains a series of printed month and year codes which can be scratched using a screwdriver to record the date of installation. This helps you in your overall maintenance planning.

gy you can depend on

UNIQUE EXTERNAL AMALGAM RESERVOIR

Controlling voltage rise is the key to long life in High Pressure Sodium lamps. GE Lighting has been highly successful in developing unique designs which achieve this control by storing the amalgam in an external metal reservoir.



*GE's 'cooler' external
amalgam reservoir keeps
more sodium for longer,
slowing the voltage rise*



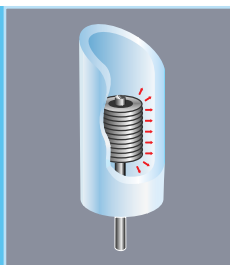
Butterfly crimp

*Amalgam is not near
electrode so cannot
cause 'blink out'*

HIGH XENON-FILL FOR LONGER LIFE & HIGHER EFFICIENCY

Lucalox HO and Classique lamps use GE's High Xenon-fill technology. Lucalox HO for extra light output with no increase in energy consumption. Lucalox Classique for warmer, richer, natural light and improved colour performance. High Xenon-fill also improves the lamps' starting characteristics, slowing the rate of lamp blackening which reduces light output and therefore Lucalox lamps stay brighter for longer, producing class-leading lumen maintenance performance of up to 90%.

Lucalox HO High Xenon-fill lamps convert more energy into light - producing up to 20% more lumens. This means improved efficiencies of up to 20% can be achieved, resulting in reduced maintenance costs, lower operating costs and reduced electricity bills.



ARC-TUBE BLACKENING

The external amalgam reservoir keeps liquid amalgam away from the electrodes and slows end blackening, and therefore voltage rise.





Less blackening also improves lumen maintenance.



THE "BUTTERFLY CRIMP" DESIGN

Patented "Butterfly Crimp" on the reservoir ensures only the right amount of vapour passes into the arc-tube at a controlled rate through life.

Versatility in light to meet your

	LUCALOX® (Lucalox T, D and RFL)	LUCALOX® HO ("High Output")
FORMATS OF LAMP	Tubular clear, Elliptical diffuse and Reflector Amalgam Reservoir	Tubular clear and Elliptical diffuse Amalgam Reservoir
FEATURES	The high efficiency, long-life lamp	The extra high output, long life lamp with High Xenon
		
BENEFITS	<ul style="list-style-type: none"> • Wide range of wattages and sizes • Up to 28,500 hours life • Highly efficient, producing 130 lumens per watt 	<ul style="list-style-type: none"> • Highly efficient, producing up to 150 lumens per watt • Energy and maintenance costs reduced by 20% • Maintains 90% of light output over life • Long life of up to 28,500 hours
APPLICATIONS	<ul style="list-style-type: none"> • Streetlighting • Industrial • Outdoor/area • Security • Architectural • Horticulture 	<ul style="list-style-type: none"> • Streetlighting • Industrial • Outdoor/area • Security • Architectural • Horticulture
		
EFFICIENCY	66-130 lms/W	80-150 lms/W
RATED AVERAGE LIFE	28 500 hours	28 500 hours
LUMEN MAINTENANCE*	80%	90%
COLOUR RENDERING INDEX Ra	25	25
COLOUR TEMPERATURE	2000K	2000K

* LUMEN MAINTENANCE: LIGHT OUTPUT AS A PERCENTAGE OF INITIAL LUMENS AT END OF RATED AVERAGE LIFE

needs

LUCALOX® E-Z LUX®

(Mercury Retrofit)

Elliptical diffuse

Amalgam Reservoir

Converts mercury sockets to high efficiency high pressure sodium lighting



- Opportunity to upgrade mercury installations without expense of changing the ballasts
- 50% more light than mercury
- 12% energy saving

- Streetlighting
- Industrial



80-84 lms/W

10-12 000 hours

84-90%

25

2000K

LUCALOX® I

(Internal Ignitor)

Elliptical clear and diffuse

Amalgam Reservoir

The efficient, long life replacement of incandescent light fittings



- Simple - luminaires only need regular HPS ballast so simpler luminaire designs can be used
- Compact - enables use of small fixture lighting systems

- Pedestrian areas
- Downlighting



66-86 lms/W

12 000 hours

85%

25

2000K

LUCALOX® CLASSIQUE

Tubular clear and Elliptical diffuse

The colour performance lamp with High Xenon



- Improved quality and colour reproduction
- Complements standard incandescent and HPS light sources
- Retrofits in standard high pressure sodium sockets

- Sports halls
- Warehouses
- Pedestrian areas
- Building facades
- Offices
- Shopping malls



77-95 lms/W

14 000 hours

87%

60

2200K

LUCALOX® TD

(Tubular Double-ended)

Tubular clear

High efficiency in an ultra compact size



- Compact size - small size fits ultra compact fixtures
- Excellent optical control - delivers a concentrated beam of light exactly where it is needed
- High efficiency
- Long 24,000 hour life

- Floodlighting
- Security
- Sportlighting
- Airports

LUCALOX® SUPERLIFE

Tubular clear and Elliptical diffuse Amalgam Reservoir

Second arc-tube to provide extra long life and instant re-strike



- Extremely long life up to 55,000 hours
- Dual arc tubes provide immediate re-ignition, eliminating hot re-strike time
- Retrofit, High Pressure Sodium lamps

- Industrial
- Roadway
- Tunnels, underground
- Security



104-138 lms/W

24 000 hours

82%

25

2000K



66-125 lms/W

40-55 000 hours

80%

25

2000K

Brand cross reference

Family	GE Description	Osram	Philips	Sylvania
Lucalox® T Tubular Clear				
	LU50/90/T/27	-	-	-
	LU70/90/T12/27	-	-	-
	LU100/100/T/40	-	-	-
	LU150/100/T/40	NAV T 150	SON T 150	SHP-T 150
	LU250/T/40	NAV T 250	SON T 250	SHP-T 250
	LU400/T/40	NAV T 400	SON T 400	SHP-T 400
	LU1000/110/T/40	NAV T 1000	SON T 1000	-
Lucalox® D Diffuse Elliptical				
	LU50/90/D/27	NAV E 50	SON 50 E	-
	LU70/90/D/27	NAV E 70	SON 70 E	-
	LU100/100/D/40	-	-	-
	LU150/100/D/40	NAV E 150	SON 150	SHP- 150
	LU250/D/40	NAV E 250	SON 250	SHP- 250
	LU400/D/40	NAV E 400	SON 400	SHP- 400
	LU1000/110/D/40	NAV E 1000	SON 1000	-
Lucalox® HO - High Output Tubular Clear				
	LU50/85/HO/T/27	NAV T 50 SUPER	SON-T-PLUS 50	SHP-TS 50
	LU70/90/HO/T12/27	NAV T 70 SUPER	SON-T-PLUS 70	SHP-TS 70
	LU100/100/HO/T/40	NAV T 100 SUPER	SON-T-PLUS 100	SHP-TS 100
	LU150/100/HO/T/40	NAV T 150 SUPER	SON-T-PLUS 150	SHP-TS 150
	LU250/HO/T/40	NAV T 250 SUPER	SON-T-PLUS 250	SHP-TS 250
	LU400/HO/T/40 NG	NAV T 400 SUPER	SON-T-PLUS 400	SHP-TS 400
	LU600/HO/T/40 NG	NAV T 600 SUPER	SON-T-PLUS 600	SHP-TS 600
Lucalox® HO - High Output Diffuse Elliptical				
	LU100/100/HO/D/40	NAV E 100 SUPER	SON-PLUS 100	SHP-S 100
	LU150/100/HO/D/40	NAV E 150 SUPER	SON-PLUS 150	SHP-S 150
	LU250/HO/D/40	NAV E 250 SUPER	SON-PLUS 250	SHP-S 250
	LU400/HO/D/40	NAV E 400 SUPER	SON-PLUS 400	SHP-S 400
Lucalox® RFL Reflector				
	LU70/RFL	-	-	-
Lucalox® E-Z Lux® Mercury Retrofit				
	LUH110/D/27	NAV E 110W	-	-
	LUH215/D/EZ/40	NAV E 210W	SON-H 220W	SHX 210
Lucalox® I Internal Ignitor				
	LU50/90/I/27	-	-	-
	LU70/90/I/27	-	-	-
	LU50/90/D/I/27	NAV E 50-I	SON 50W-I	-
	LU70/90/D/I/27	NAV E 70-I	SON 70W-I	SHP 70-I
Lucalox® Classique Tubular Clear				
	LU150/CL-DL/T/40	NAV T 150 DELUXE	SON T COMFORT 150	-
	LU250/CL-DL/T/40	NAV T 250 DELUXE	SON T COMFORT 250	-
	LU400/CL-DL/T/40	NAV T 400 DELUXE	SON T COMFORT 400	-
Lucalox® Classique Diffuse Elliptical				
	LU150/CL-DL/D/40	NAV E 150 DELUXE	SON COMFORT 150	-
	LU250/CL-DL/D/40	NAV E 250 DELUXE	SON COMFORT 250	-
	LU400/CL-DL/D/40	NAV E 400 DELUXE	SON COMFORT 400	-
Lucalox® TD Tubular Double-ended				
	LU250/TD	NAV TS 250	-	-
	LU400/TD	NAV TS 400	-	-
	LU1000/TD	-	-	-
Lucalox® Superlife Tubular Clear				
	LU50/90/SBY/T/27	-	-	SHP-T Twinarc 50W
	LU70/90/SBY/T12/27	-	-	SHP-T Twinarc 70W
	LU100/100/SBY/T/40	-	-	SHP-T Twinarc 100W
	LU150/100/SBY/T/40	-	-	SHP-T Twinarc 150W
	LU250/SBY/T/40	-	-	SHP-T Twinarc 250W
	LU400/SBY/T/40	-	-	SHP-T Twinarc 400W
Lucalox® Superlife Diffuse Elliptical				
	LU50/90/SBY/D/27	-	-	SHP Twinarc 50W
	LU70/90/SBY/D/27	-	-	SHP Twinarc 70W
	LU100/100/SBY/D/40	-	-	SHP Twinarc 100W
	LU150/100/SBY/40	-	-	SHP Twinarc 150W
	LU250/SBY/D/40	-	-	SHP Twinarc 250W
	LU400/SBY/D/40	-	-	SHP Twinarc 400W

This table shows GE and alternative brand order codes. These cross references are provided as a quick reference and may only represent a near equivalent to other brands, and is accurate as at date of publication of this catalogue.

The GE Lucalox range

Watts	CCT °K	Max. Overall Length mm	Diameter mm	LCL mm	Order Code	CRI Ra	Lumen Maint.	Cap	Operating Position	Initial Lumens	Rated Average Life Hours	Pack Qty	Product Code
Lucalox® T Tubular Clear - Amalgam Reservoir										⚠			
50	2000	156	38.5	97	LU50/90/T/27	25	80	E27	U	3400	28500	25	22445
70	2000	156	38.5	97	LU70/90/T12/27	25	80	E27	U	6000	28500	25	22452
100	2000	211	48	133	LU100/100/T/40	25	80	E40	U	9600	28500	12	17590
150	2000	211	48	133	LU150/100/T/40	25	80	E40	U	15000	28500	12	44244
250	2000	260	48	158	LU250/T/40	25	80	E40	U	27500	28500	12	22453
400	2000	278	48	175	LU400/T/40	25	80	E40	U	50000	28500	12	11678
1000*	2000	372	67	240	LU1000/110/T/40	25	80	E40	U	130000	24000	12	35045
Lucalox® D Diffuse Elliptical - Amalgam Reservoir										⚠			
50	2000	154	72	-	LU50/90/D/27	25	80	E27	U	3300	28500	12	10794
70	2000	154	72	-	LU70/90/D/27	25	80	E27	U	5800	28500	12	10101
100	2000	186	76	-	LU100/100/D/40	25	80	E40	U	9200	28500	12	17589
150	2000	227	91	-	LU150/100/D/40	25	80	E40	U	14500	28500	12	44245
250	2000	227	91	-	LU250/D/40	25	80	E40	U	26000	28500	12	44052
400	2000	292	122	-	LU400/D/40	25	80	E40	U	47500	28500	6	44057
1000*	2000	372	162	-	LU1000/110/D/40	25	80	E40	U	120000	24000	1	30228
Lucalox® HO - High Output Tubular Clear - Amalgam Reservoir										⚠			
50	2000	156	38.5	97	LU50/85/HO/T/27	25	90	E27	U	4000	28500	25	35109
70	2000	156	38.5	97	LU70/90/HO/T12/27	25	90	E27	U	6500	28500	25	35112
100	2000	211	48	133	LU100/100/HO/T/40	25	90	E40	U	10000	28500	12	35113
150	2000	211	48	133	LU150/100/HO/T/40	25	90	E40	U	17500	28500	12	35114
250	2000	260	48	158	LU250/HO/T/40	25	90	E40	U	33000	28500	12	35120
400	2000	278	48	175	LU400/HO/T/40 NG	25	90	E40	U	56500	28500	12	47963
600	2000	278	48	175	LU600/HO/T/40 NG	25	90	E40	U	90000	28500	12	47962
Lucalox® HO - High Output Diffuse Elliptical - Amalgam Reservoir										⚠			
100	2000	186	76	-	LU100/100/HO/D/40	25	90	E40	U	9600	28500	12	35300
150	2000	227	91	-	LU150/100/HO/D/40	25	90	E40	U	16900	28500	12	35301
250	2000	227	91	-	LU250/HO/D/40	25	90	E40	U	31200	28500	12	35302
400	2000	292	122	-	LU400/HO/D/40	25	90	E40	U	53700	28500	6	35295
Lucalox® RFL - Reflector										⚠			
70	2000	144	96	-	LU70/RFL	25	80	E27	U	4000	24000	10	30238
Lucalox® E-Z Lux® Mercury Retrofit - Diffuse Elliptical - Amalgam Reservoir										⚠			
110	2000	175	75	-	LUH110/D/EZ/27	25	84	E27	U	8800	10000	12	11683
215	2000	232	89	-	LUH215/D/EZ/40	25	90	E40	U	18000	12000	12	49941
Lucalox® I - Internal Ignitor Clear Elliptical, Amalgam Reservoir										⚠			
50	2000	156	72	117	LU50/90/I/27	25	85	E27	U	3400	12000	12	11733
70	2000	156	72	117	LU70/90/I/27	25	85	E27	U	6000	12000	12	11735
Lucalox® I - Internal Ignitor Diffuse Elliptical - Amalgam Reservoir										⚠			
50	2000	156	72	-	LU50/90/D/I/27	25	85	E27	U	3300	12000	12	11734
70	2000	156	72	-	LU70/90/D/I/27	25	85	E27	U	5800	12000	12	11736
Lucalox® Classique Tubular Clear										⚠			
150	2200	210	48	132	LU150/CL-DL/T/40	60	87	E40	U	12000	14000	10	34929
250	2200	260	48	158	LU250/CL-DL/T/40	60	87	E40	U	23000	14000	10	44761
400	2200	285	48	175	LU400/CL-DL/T/40	60	87	E40	U	38000	14000	10	44759
Lucalox® Classique Diffuse Elliptical										⚠			
150	2200	227	91	-	LU150/CL-DL/D/40	60	87	E40	U	11500	14000	10	34928
250	2200	227	91	-	LU250/CL-DL/D/40	60	87	E40	U	22000	14000	10	44762
400	2200	286	122	-	LU400/CL-DL/D/40	60	87	E40	U	36000	14000	10	44760
Lucalox® TD - Tubular Double-ended Clear										⚠			
250	2000	191	22	-	LU250/TD	25	82	RX7s	H (±20°)	26000	24000	10	30241
400	2000	256	22	-	LU400/TD	25	82	RX7s	H (±20°)	48000	24000	10	30244
1000	2000	334	22	-	LU1000/TD	25	82	RX7s	H (±20°)	137500	24000	10	30246
Lucalox® Superlife Tubular Clear - Amalgam Reservoir										⚠			
50	2000	156	38.5	97	LU50/90/SBY/T/27	25	80	E27	U	3400	40000	25	35585
70	2000	156	38.5	97	LU70/90/SBY/T12/27	25	80	E27	U	6000	40000	25	35593
100	2000	211	48	133	LU100/100/SBY/T/40	25	80	E40	U	9600	40000	12	35592
150	2000	211	48	133	LU150/100/SBY/T/40	25	80	E40	U	15000	50000	12	35594
250	2000	260	48	158	LU250/SBY/T/40	25	80	E40	U	27500	55000	12	35586
400	2000	278	48	175	LU400/SBY/T/40	25	80	E40	U	50000	55000	12	35582
Lucalox® Superlife Diffuse Elliptical - Amalgam Reservoir										⚠			
50	2000	156	72	-	LU50/90/SBY/D/27	25	80	E27	U	3300	40000	12	35583
70	2000	156	72	-	LU70/90/SBY/D/27	25	80	E27	U	5800	40000	12	35587
100	2000	186	76	-	LU100/100/SBY/D/40	25	80	E40	U	9200	40000	12	35588
150	2000	227	91	-	LU150/100/SBY/D/40	25	80	E40	U	14500	50000	12	35589
250	2000	227	91	-	LU250/SBY/D/40	25	80	E40	U	26000	55000	12	35590
400	2000	292	122	-	LU400/SBY/D/40	25	80	E40	U	47500	55000	6	35591

⚠ External Ignitor ⚠ Internal Ignitor

* Internal amalgam reservoir

Notes: Operating position universal except for TD Horizontal ±20° ANSI specification Lucalox lamps are available upon request
Please contact your local sales office for further information
GE reserve right to change specification