



GE Lighting

Spectrum

The GE Lighting Lamp Catalogue 1999/2000

spectrum / 'spektrəm/ n. (pl. -tra)
band of colours as seen in rainbow etc.;
entire or wide range of anything
arranged by degree or quality etc.

*Source: New Edition Pocket Oxford Dictionary
Oxford University Press, 1992*

This is now the 4th edition of
Spectrum - The GE Lighting
Lamp Catalogue.

GE Lighting is constantly
developing and improving its
products. For this reason, all
product descriptions in this
brochure are intended as a
general guide, and we may
change some specifications from
time to time in the interests of
product improvement.

General conditions of sale

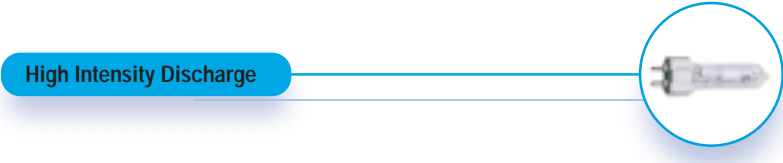
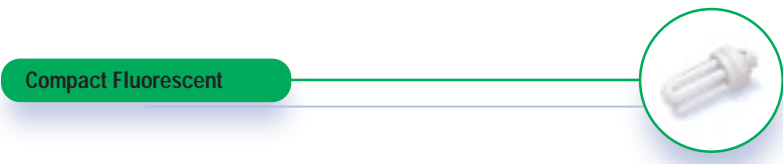
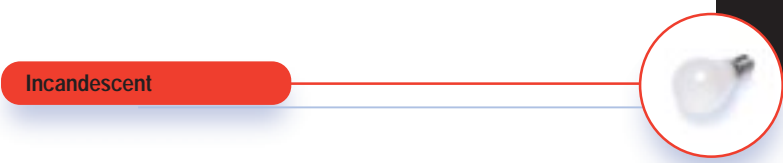
GE Lighting products are supplied
according to the Company's
General Conditions of Sale.
If you require a copy of these
conditions please contact your
nearest GE Lighting sales office.

Prices

A price list is available from all
GE Lighting sales offices.

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There are a lot of good reasons for choosing GE Lighting to meet your lamp requirements

- GE is one of the world's most successful companies, its policies and practices have been adopted throughout the world.
- GE Lighting is one of the largest suppliers of light sources in the world.
- The GE organisation has a worldwide reputation for quality, innovation and market success in a wide range of industries.
- GE Lighting's vision is to be the premier provider of lighting solutions with products, processes and service that is customer focused and quality orientated.
- GE is focused on improving customer productivity and reducing capital outlays, while increasing quality, speed and efficiency through the commercialisation of Six Sigma.
- GE Lighting is intensifying the focus of Six Sigma impacting customers, ensuring that they feel the benefits of this highly successful quality strategy.

GE is one of the largest companies in the world with a reputation for being the market leader in a majority of the industries in which it operates. This enables us to add value for GE Lighting customers in the form of other services and skills available within the group.

It is the values of GE as a global company that make a real difference to the quality of the relationship between ourselves and our partners and customers.

Quality

GE Lighting is constantly driving up standards in lamp manufacturing with the widespread use of the Six Sigma quality strategy, improving reliability for users and reducing maintenance costs.

Commitment

In every market where we operate we become a key player through internal investment, strategic alliances and acquisitions - for our customers this means the most innovative products and the most effective support.

Excellence

We continue to establish 'Centres of Excellence' for lamp manufacturing, engineering and technological development - delivering advanced products of the highest quality.

Innovation

We have an unbroken record of innovation in lamp technology - which enables us to provide customers with high performance, cost-efficient lighting solutions.

GE Business Operations

GE Aircraft Engines

A world leader in quiet, fuel efficient jet engines for use in commercial, marine and industrial aircraft. It also supplies logistical, maintenance/overhaul support and repair services.

GE Appliances

A global leader in the manufacturing and marketing of major appliances, producing refrigerators, freezers, washing machines, microwave ovens and other appliances under the brands Profile, GE, RCA and Hotpoint.

GE Capital

Offers financial services in the areas of equipment management, consumer services, mid-market financing, specialized financing and specialty insurance.

GE Industrial Systems

A global leader offering products and services for various industries ranging from low voltage products and switchgears to industrial controls, drives and AC and DC motors.

GE Information Services

A leading supplier of global business productivity solutions; EDI; network-based services; databases; translation/desktop software re-engineering; consulting, integration community support and client services.

GE Lighting

A leading supplier of lighting products for global consumer, commercial and industrial markets.

GE Medical Systems

A world leader in medical diagnostic imaging technology, constantly innovating better, less invasive treatment through X-ray, magnetic resonance, computerised tomography, ultrasound and network products and services.

NBC

The leading US television network with cable operations including CNBC and MSNBC, a 24-hour interactive news service in conjunction with Microsoft.

GE Plastics

A world leader in versatile high-performance engineered plastics used in computer, electronics, automotive and other industries.

GE Power Systems

A world leader in the design, manufacture and service of gas, steam and hydroelectric turbines and generators.

GE Transportation Systems

Manufactures more than half of the diesel freight locomotives in North America and its locomotives operate in 75 countries worldwide.

Raising standards in lighting



GE Lighting is a direct descendant of the General Electric Company,

founded by Thomas Edison, one of the century's most celebrated inventors. Edison applied his unique understanding of electricity to the invention of dynamos, motors, and the world's first phonograph as well as inventing the electric lamp in 1879.

GE Lighting continues this proud tradition - using the power of science to man's advantage. The company's commitment to continuous innovation can be seen in the record we have of being the first in the world to develop new lamp technologies. As the largest producer of lamps in the world today, we can provide our customers with a wide range of high quality

lamps for all applications. Our focus remains on making lamps that are more efficient and therefore economic to run, whilst also enhancing performance and length of life.

GE Lighting - setting new standards in lamp performance.

- In 1907 GE was the first company to use 'tungsten' - a filament material that was twice as efficient and long-lasting as the earlier carbon-based filaments. The further development of tungsten made durable, vibration resistant lamps for commercial, industrial and transport use possible.
- GE was the first company to develop mercury vapor lamps. The energy efficiency and long life of this lamp type made the first practical outdoor sports and street lighting possible.
- GE was the first to produce fluorescent lamps - a form of lighting that transformed domestic, office and factory lighting.
- GE invented the halogen lamp - a form of bright, white lighting that is now extremely popular in public spaces, homes and offices.

GE pioneered a majority of the lamp technologies that light our world today.

Our focus on continuous improvement of lamp life, output and energy efficiency is delivering substantial benefits to customers all over the world.

In over 100 years of developing more effective lamps, GE Lighting has focused consistently on improving the quality of light produced and reducing the cost of light for end users.

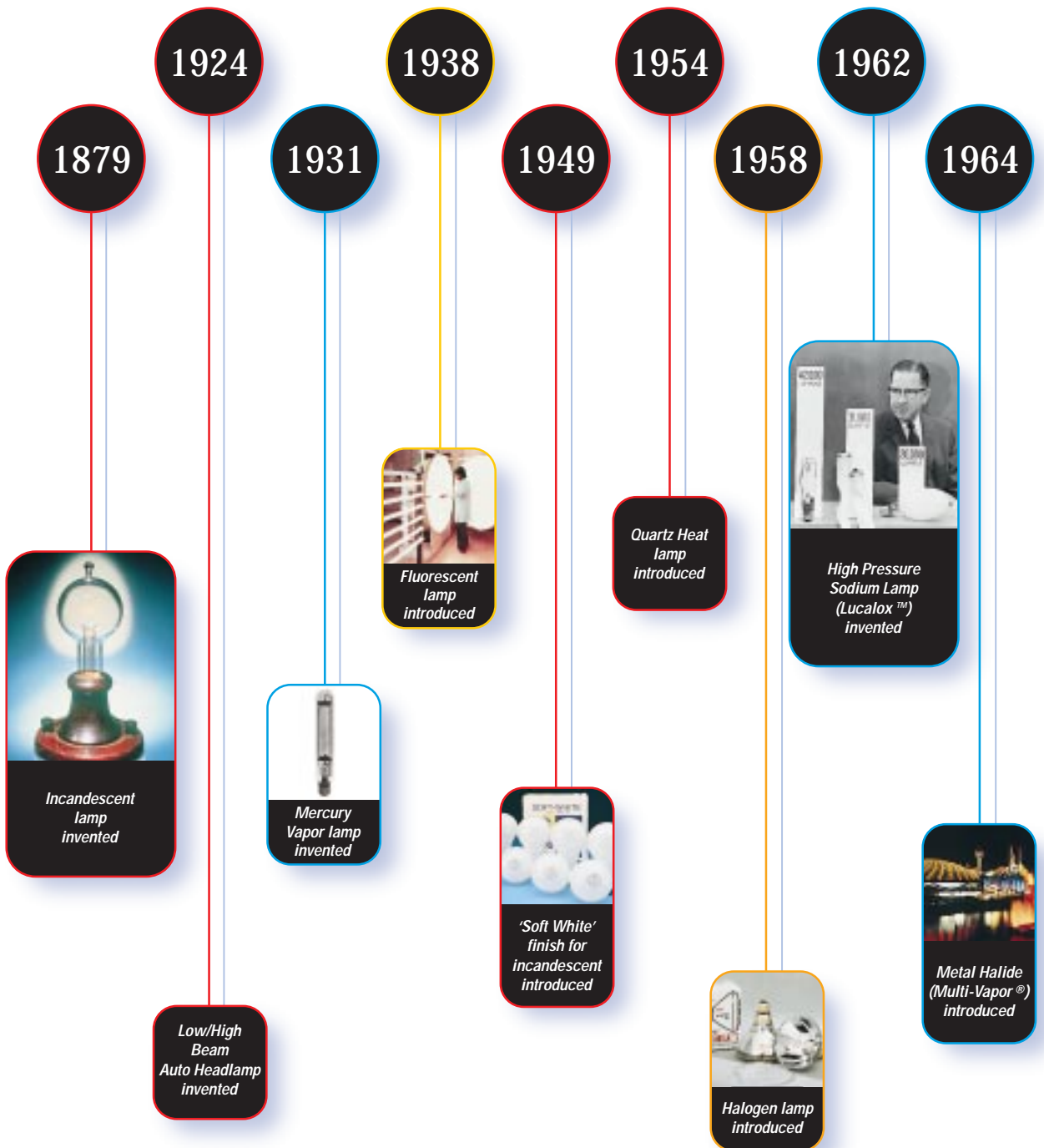


Edison Day window display 1915 at Rikers Drug Store, 200 Broadway, New York City.

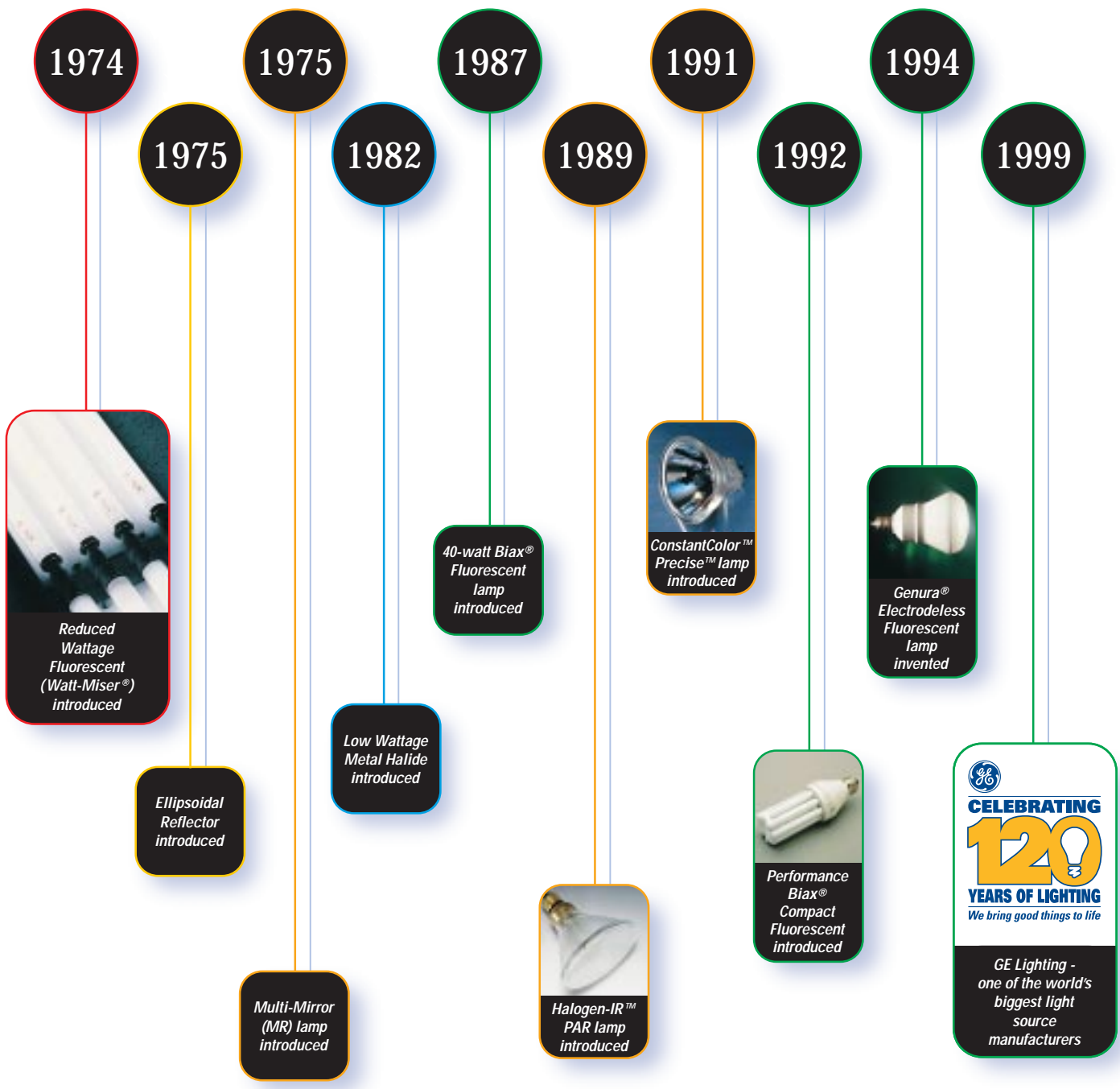
On 21 October, 1879, Thomas A. Edison produced the first incandescent lamp. In honour of his genius this day became known as 'Edison Day' and was widely celebrated all over the States for many years thereafter.

Source: 'The General Electric Story' 1876 - 1986 - A Hall of History Publication, Schenectady, New York, October 1989, Third Printing - Second Edition.

Lamp technology development



GE's founder, Thomas Edison, invented the first practical incandescent lamp in 1879; today GE Lighting is one of the world's biggest light source manufacturers with a reputation for innovation and quality.



Source: 'The General Electric Story' 1876 - 1986 - A Hall of History Publication, Schenectady, New York, October 1989, Third Printing - Second Edition.

Focusing on customers' needs

GE's history of technical firsts reflects a consistent focus on providing customers and end users with added value and reduced lighting costs.



Longer life hours & Energy efficiency

Giving maximum return on your lighting investment.

Reduced maintenance costs

Longer life lamps mean lower labour costs for maintenance - a cost that can be more than the lamps!

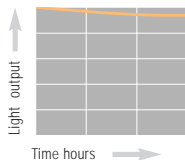


Improved colour rendering

Enhanced colour performance for an increasingly demanding market.

Consistent colour

Making lamps that look better for longer, reducing variations when single lamps are replaced.



Better lumen maintenance

Building in energy efficiency and maintaining high standards of illumination.

Multi application

Versatile lamps for use in a wide range of light fittings.



New technology

GE invented fluorescent and halogen lamps as well as Genura, the world's first energy-saving induction lamp in a conventional design.

Innovation

Continuous investment in pushing forward the boundaries of lamp design and efficiency, including the 3 part arc tube for ceramic metal halide lamps.



Lighting - how to save money

The cost of replacing lamps is often more than the cost of the lamps themselves...

Naturally, you will want to reduce these maintenance costs as much as possible and here GE's long life lamps can significantly help. But all lamp types can offer dramatic savings if the most efficient maintenance and replacement procedure is identified for each application.

Installation monitoring - the advantages

Monitoring and recording the performance of your lighting installation can offer significant cost benefits. By drawing up an installation plan, identifying lamp types, wattages and their installation dates, you can:

- Accurately monitor lamp life and costs
- Identify problem fittings so remedial action can follow
- Easily establish the correct lamp type and wattage when a replacement lamp is required.

Replacing lamps and maintenance

Replacing lamps can be carried out on an individual or bulk basis. The method you select and the time of replacement will depend on factors such as:

- The cost and ease of access
- A requirement to maintain minimum light levels
- The rated life and the lumen maintenance characteristics of the lamps selected (See Comparing light sources).

Maintaining light output

Lumen maintenance measures a lamp's ability to maintain a consistent light output throughout its life. High lumen maintenance over a given period of time means less lamp replacement is needed to maintain light levels, reducing maintenance costs. Fluorescent lamps also help to reduce installation costs because they eliminate the need to fit extra lamps in order to compensate for falling light output.

Cleaning and relamping regularly, extends life, maintains light and reduces energy consumption.

Over time lumen depreciation of lamp (line 1) combined with dirt build up in luminaire (line 2) means deterioration of total light output (line 3). Cleaning lamps and luminaires extends life.

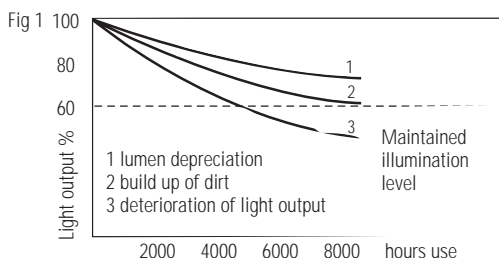
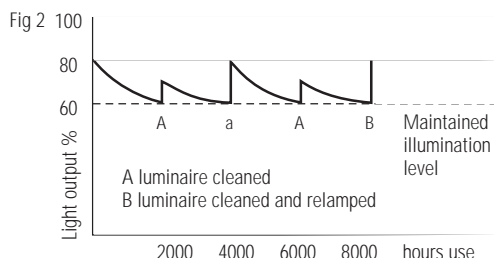


Figure 1 shows total light output (line 3) falling below the maintained illumination level.

Fewer luminaires are required if an installation is regularly maintained. Figure 2 shows 20% energy savings are possible by incorporating a 2000 hour cleaning cycle and a 4000 hour relamping cycle.



Energy efficiency classification

The European Union published a Commission Directive in January 1998 regarding the efficiency labelling of household lamps (98/11/EC) effective 1 July 1999. However a transition period is allowed for lamps displaying the label at retail outlets until 1 January 2001.

The directive requires that all household lamps that are supplied directly from the mains have a label on the product/packaging that indicates the energy efficiency class of lamp (lm/W). Lamps which have a luminous flux of greater than 6,500 lumens are excluded from the labelling requirement. Reflector lamps and those with an input power of less than 4 watts are also excluded.

The classification scheme grades lamps into 7 classes, from **A** to **G**, with class **A** having the highest efficiency.

The scheme classifies lamps as follows:

- A** Triphosphor fluorescent lamps, both linear and pin compact fluorescent. Integral compact fluorescent with electronic ballast
- B** Halophosphate linear fluorescent with electronic ballast. Integral compact fluorescent with magnetic ballast
- C** High efficiency halogen lamps
- D** Other halogen lamps
- E/F** Standard incandescent lamps
- G** Decorative incandescent and others

Energy label	
A	Lumen Watt h
B	
C	
D	
E	
F	
G	
XYZ	1000

Incandescent



Incandescent lamps

Incandescent lamps are the most familiar type of light source with countless applications in homes, shops and other commercial settings. Light is produced by passing electric current through a thin wire filament - usually made of tungsten - which glows giving off heat and light. Incandescent lamps have a number of advantages including:

- Low initial cost
- Excellent colour reproduction qualities
- Good optical control over the spread and direction of light
- Flexibility and versatility, with no need for electronic starting and control systems

However, incandescent lamps have a relatively short lamp life (typically 1,000 hours), and over 95% of the energy they produce is converted to heat and only 5% is light. It was these characteristics of incandescent lamps that led to the development of today's higher performance light sources.



Variety, versatility and low cost make incandescent lamps a standard choice.

Incandescent lamps offer a low initial cost, ease of use and excellent colour reproduction qualities.

Halogen



Halogen lamps

Invented by GE Lighting in 1958, halogen lamps provide a compact, high output light source that has revolutionised the world of lighting. Unlike standard incandescent lamps, halogen lamps use a halogen gas which allows the lamps to burn more brightly without sacrificing life. Halogen lamps are more efficient than incandescent lamps at converting electricity into light and therefore give more light from less energy and from a smaller physical size.

Compared to equivalent incandescent lamps, halogen lamps:

- Use energy more efficiently
- Offer a longer life, with up to six times the life expectancy
- Provide a crisper, whiter light
- Provide better beam control, allowing light to be directed with much greater accuracy
- Offer a more compact size, creating new design opportunities.

Halogen offers amazing light quality, intensity and control.

Ideal for display lighting in a range of demanding interiors.



Crisp, white halogen light creates dramatic effects in retail lighting.

Fluorescent



Fluorescent lamps

Fluorescent light is produced when the phosphor coating in the lamp tube converts UV light into visible light, after a gas discharge is created in the tube. This is a highly efficient form of generating light. Because of their large surface area, the light produced by fluorescent lamps is more diffuse and less directional than 'point' sources such as incandescent, halogen and discharge lamps. This quality, plus their high energy efficiency, make fluorescent lamps ideal for lighting large open areas such as offices, commercial, industrial and public buildings.

GE's Polylux XL lamps are high performance triphosphor lamps offering:

- Excellent colour reproduction
- Higher light output for longer - with 95% lumen maintenance
- Longer life (up to 18,000 hours with electronic gear)
- 18% more light output than standard halophosphate tubes.

GE triphosphor fluorescent lamps are improving working environments with high light output, energy efficiency and excellent colour reproduction.

Fluorescent tubes are offered in warm and cool white colours, as well as daylight which produce light close to natural light. They are also offered in a choice of coatings, standard halophosphate, where low initial cost is the most important factor, or triphosphor with improved colour rendering and significant energy savings.



Today's high performance fluorescent tubes provide warmer, more natural working environments.

Compact Fluorescent



Compact Fluorescent lamps

Compact fluorescent lamps represent a major breakthrough in fluorescent tube technology. GE Lighting provides advanced compact fluorescents whose size, shape and light distribution match that of standard incandescents - but whose length of life and energy-saving characteristics are those of a fluorescent lamp. The addition of GE amalgam dosing technology ensures that consistent high light output is maintained regardless of temperature changes or angle of installation.

Compared to incandescent lamps, compact fluorescents typically provide:

- The same light output at only 20% of energy consumption
- Up to 10-12 times longer life - and Genura up to 15 times - dramatically reducing operating and maintenance costs.



Energy-saving Biax downlighters replace incandescent lamps in this library.

Compact fluorescents have led to a new generation of light fittings, providing energy savings and reduced maintenance costs.

	40W	→	7W/9W	
	60W	→	11W	
	75W	→	15W	
	100W	→	20W	
	120W	→	23W	

High Intensity Discharge



Discharge lamps

Discharge lamps rely on the light emitted by a gas vapour when electricity is passed through it. They are highly energy efficient and reliable over long periods of time. The range falls into five categories:

- ConstantColor CMH
- Metal Halide Lamps
- High Pressure Sodium Lamps
- Mercury lamps
- Low Pressure Sodium Lamps.

ConstantColor CMH

The latest development in metal halide technology - ceramic metal halide (CMH) - has advanced performance even further. ConstantColor CMH lamps provide a high level of light uniformity from lamp to lamp and over life. This makes them ideal for colour critical areas.

Metal Halide lamps

The metal halide range consists of four easy to use product families - Arcstream®, Kolorarc™, Sportlight™ and Multi-Vapor®. They offer excellent energy efficiency, crisp, white light and excellent colour reproduction for lighting:

- Retail displays
- High bay industrial areas
- Sports lighting and floodlighting.



High Intensity Discharge lamps provide one of the most cost-effective ways of lighting public spaces.

The outstanding efficiency, reliability and long life of discharge lamps makes them ideal for retail, roadway and floodlighting applications.

High Pressure Sodium lamps

HPS lamps are more often used where long-term economics - rather than accurate colour reproduction - are of more importance. They are highly efficient and produce a warm, yellow colour good for lighting:

- Large parks
- Shopping malls
- Roadways
- Amenity areas.

Mercury lamps

Mercury lamps are highly reliable. Although they are not as energy efficient as other discharge lamps, and provide reduced colour reproduction, they require simpler starting and operating control circuits. This offers significant installation, operating and maintenance savings in applications such as:

- Road lighting
- Security lighting
- Landscape lighting.

Low Pressure Sodium lamps

These lamps are extremely efficient for applications where economical operation over long periods is critical. They offer qualities perfectly suited to street lighting:

- Familiar monochromatic yellow light
- A three year life in normal use
- Superb energy efficiency.



A striking combination of white uplighters with warm yellow downlighters at the Hotel Kempinski, Munich Airport, Germany.

Incandescent Lamps

GE incandescent lamps come in all shapes and sizes, covering the whole spectrum of user needs and give particular qualities of light or suit particular applications. From GE you get more variety in incandescent lamps than you would ever have thought possible.



Decorative incandescent lamps used to create a warm inviting ambience at a cafe in New York



Incandescent

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Product identification

The following glossary of terms and descriptions can help you when checking incandescent lamp specifications and explains how to use the order codes when ordering products. Within each product line, lamps are divided into families - within families, lamps are listed by wattage.

Watts:
Energy used. To find actual energy used (kWh) multiply power (watts shown) x time divided by 1000

Product description:
The lamp's identification code

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

Diameter:
Lamp diameter in mm

Lumens:
The lamp's rate output after the initial 2 hours of operation

Energy Efficiency Class:
Energy saving code

General Lighting Service

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
FR/E27 Frosted							
15	230	60	15A1/FR/E27	90	10/50	F	327916
25	230	60	25A1/FR/E27	225	10/50	E	327922
40	230	60	40A1/FR/E27	415	10/50	E	327932
60	230	60	60A1/FR/E27	710	10/50	E	327939
75	230	60	75A1/FR/E27	940	10/50	E	327961

Lamp:
Lamp type followed by its cap - screw, bayonet etc. and finish

Pack Quantity:
The number of lamps in one box

Volts:
Each lamp's voltage is listed

75 A1 / FR / E27

Identifies the lamp's wattage

Identifies the cap type

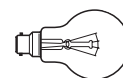
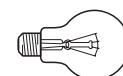
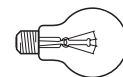
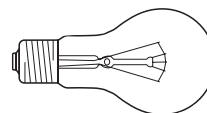
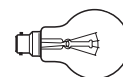
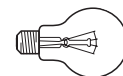
Describes type of lamp

Identifies the finish of the lamp

Incandescent

General Lighting Service

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
FR/E27 Frosted							
15	230	60	15A1/FR/E27	90	10/50	F	327916
25	230	60	25A1/FR/E27	225	10/50	E	327922
40	230	60	40A1/FR/E27	415	10/50	E	327932
60	230	60	60A1/FR/E27	710	10/50	E	327939
75	230	60	75A1/FR/E27	940	10/50	E	327961
100	230	60	100A1/FR/E27	1360	10/50	E	327965
150	230	68	150A1/FR/E27	2150	1/20	E	327978
200	230	80	200A1/FR/E27	3050	1/20	E	47987
FR/E27 Frosted							
25	240	60	25A1/FR/E27	225	10/50	E	327925
40	240	60	40A1/FR/E27	415	10/50	E	327936
60	240	60	60A1/FR/E27	710	10/50	E	327957
75	240	60	75A1/FR/E27	940	10/50	E	327963
100	240	60	100A1/FR/E27	1360	10/50	E	327976
FR/B22 Frosted							
15	230	60	15A1/FR/B22	90	10/50	F	327920
25	230	60	25A1/FR/B22	225	10/50	E	327924
40	230	60	40A1/FR/B22	415	10/50	E	327933
60	230	60	60A1/FR/B22	710	10/50	E	327955
75	230	60	75A1/FR/B22	940	10/50	E	327962
100	230	60	100A1/FR/B22	1360	10/50	E	327966
150	230	68	150A1/FR/B22	2150	1/20	E	327982
CL/E27 Clear							
15	230	60	15A1/CL/E27	90	10/50	F	327836
25	230	60	25A1/CL/E27	225	10/50	E	327839
40	230	60	40A1/CL/E27	415	10/50	E	327843
60	230	60	60A1/CL/E27	710	10/50	E	327852
75	230	60	75A1/CL/E27	940	10/50	E	327874
100	230	60	100A1/CL/E27	1340	10/50	E	327878
150	230	68	150A1/CL/E27	2160	1/20	E	327894
200	230	80	200A1/CL/E27	3050	1/20	E	327906
300	230/240	90	300A1/CL/E27	4850	1/20	E	27913
CL/B22 Clear							
15	230	60	15A1/CL/B22	90	10/50	F	327837
25	230	60	25A1/CL/B22	225	10/50	E	327840
40	230	60	40A1/CL/B22	415	10/50	E	327847
60	230	60	60A1/CL/B22	710	10/50	E	327855
75	230	60	75A1/CL/B22	940	10/50	E	327875
100	230	60	100A1/CL/B22	1360	10/50	E	327883
150	230	68	150A1/CL/B22	2150	1/20	E	327896
CL/E40 Clear							
300	230/240	90	300A1/CL/E40	4850	1/20	E	27914
CL/E27 Clear							
25	240	60	25A1/CL/E27	225	10/50	E	327841
40	240	60	40A1/CL/E27	415	10/50	E	327849
60	240	60	60A1/CL/E27	710	10/50	E	327869
75	240	60	75A1/CL/E27	940	10/50	E	327876
100	240	60	100A1/CL/E27	1360	10/50	E	327891
CL/E27 Clear							
40	250	60	40A1/CL/E27	415	10/100	E	29109
60	250	60	60A1/CL/E27	710	10/100	E	29194
75	250	60	75A1/CL/E27	940	10/100	E	29205
100	250	60	100A1/CL/E27	1360	10/100	E	29215
CL/B22 Clear							
40	250	60	40A1/CL/B22	415	10/100	E	29083
60	250	60	60A1/CL/B22	710	10/100	E	29084
75	250	60	75A1/CL/B22	940	10/100	E	29104
100	250	60	100A1/CL/B22	1360	10/100	E	29105



Incandescent



Softlight

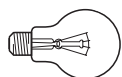
Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Softlight E27 T-shape Opal							
25	230	60	25A1/SL/E27	200	10/50	F	328190
40	230	60	40A1/SL/E27	370	10/50	F	328199
60	230	60	60A1/SL/E27	630	10/50	F	328203
75	230	60	75A1/SL/E27	860	10/50	F	328207
100	230	60	100A1/SL/E27	1220	10/50	F	328211
Softlight B22 T-shape Opal							
40	230	60	40A1/SL/B22	370	10/50	F	328200
60	230	60	60A1/SL/B22	630	10/50	F	328204
75	230	60	75A1/SL/B22	860	10/50	F	328208
100	230	60	100A1/SL/B22	1220	10/50	F	328212

Coloured General Lighting Service

Watts	Volts	Diameter mm	Colour	Product Description	Pack Quantity	Product Code
Coloured GLS E27						
15	230	60	Red	15A1/R/E27	10/50	47995
25	230	60	Red	25A1/R/E27	10/50	47590
40	230	60	Red	40A1/R/E27	10/50	47591
60	230	60	Red	60A1/R/E27	10/50	37572
15	230	60	Yellow	15A1/Y/E27	10/50	47994
25	230	60	Yellow	25A1/Y/E27	10/50	47592
40	230	60	Yellow	40A1/Y/E27	10/50	47593
60	230	60	Yellow	60A1/Y/E27	10/50	37581
15	230	60	Green	15A1/G/E27	10/50	47993
25	230	60	Green	25A1/G/E27	10/50	47594
40	230	60	Green	40A1/G/E27	10/50	47595
60	230	60	Green	60A1/G/E27	10/50	37580
15	230	60	Blue	15A1/B/E27	10/50	47992
25	230	60	Blue	25A1/B/E27	10/50	47891
40	230	60	Blue	40A1/B/E27	10/50	47615
60	230	60	Blue	60A1/B/E27	10/50	37576
15	230	60	Orange	15A1/O/E27	10/50	47991
25	230	60	Orange	25A1/O/E27	10/50	47616
40	230	60	Orange	40A1/O/E27	10/50	47617

Longlife General Lighting Service

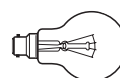
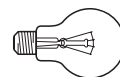
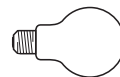
Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
GLS Long Life E27 Clear							
25	230/240	60	25A1/CL/LL/E27	190	15/30	F	33116
40	230/240	60	40A1/CL/LL/E27	300	15/30	G	33122
60	230/240	60	60A1/CL/LL/E27	540	15/30	F	33130
75	230/240	60	75A1/CL/LL/E27	730	15/30	F	33136
100	230/240	60	100A1/CL/LL/E27	1080	15/30	F	33141



Incandescent

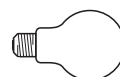
Low & Extra Low Voltage General Lighting Service

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
GLS Low Voltage Life E27 Frosted							
40	24	60	24V40/FR/E27	590	10/100	D	29044
60	24	60	24V60/FR/E27	950	10/100	D	29048
100	24	60	24V100/FR/E27	1740	1/20	D	29053
GLS Low Voltage Life E27 Clear							
40	24	60	24V40/CL/E27	590	10/100	D	30109
60	24	60	24V60/CL/E27	950	10/100	D	30108
GLS Low Voltage Life B22 Clear							
40	24	60	24V40/CL/B22	590	10/100	D	30112
60	24	60	24V60/CL/B22	950	10/100	D	30098
GLS Low Voltage Life E27 Frosted							
60	42	60	42V60/FR/E27	870	10/100	D	29051

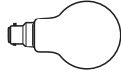
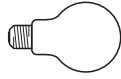


Weekend/Insect light

Watts	Volts	Diameter mm	Product Description	Pack Quantity	Product Code
GLS Weekend E27					
60	230	60	60A1/WEEKEND/E27	10/50	47986
100	230	60	100A1/WEEKEND/E27	10/50	47984



Incandescent

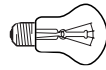
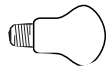
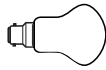
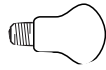
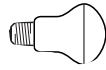


Rough Service

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Rough Service E27 Frosted							
40	230/240	60	40A1/FR/RS/E27	245	1/20	G	28048
60	230/240	60	60A1/FR/RS/E27	490	1/20	F	28054
100	230/240	60	100A1/FR/RS/E27	860	1/20	G	28058
Rough Service B22 Frosted							
100	230/240	60	100A1/FR/RS/B22	860	1/20		28060

Krypton

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Krypton E27 Superblux (Frosted / Opal)							
25	230	50	25MK1/S/E27	200	10/50	E	328156
40	230	50	40MK1/S/E27	405	10/50	E	328162
60	230	50	60MK1/S/E27	700	10/50	E	328172
75	230	55	75MK1/S/E27	910	10/50	E	33342
100	230	55	100MK1/S/E27	1320	10/50	E	328185
Krypton E27 Opal							
25	230	50	25MK1/O/E27	210	10/50	F	32618
40	230	50	40MK1/O/E27	380	10/50	F	32616
60	230	50	60MK1/O/E27	655	10/50	E	32613
75	230	55	75MK1/O/E27	865	10/50	E	32612
100	230	55	100MK1/O/E27	1235	10/50	F	32611
Krypton B22 Opal							
40	230	50	40MK1/O/B22	405	10/50	F	33341
60	230	50	60MK1/O/B22	700	10/50	E	33338
75	230	55	75MK1/O/B22	910	10/50	E	33336
100	230	55	100MK1/O/B22	1320	10/50	F	33337
Krypton E27 Frosted							
40	230	50	40MK1/FR/E27	455	10/50	E	328096
60	230	50	60MK1/FR/E27	780	10/50	E	328109
75	230	55	75MK1/FR/E27	1030	10/50	E	328121
100	230	55	100MK1/FR/E27	1475	10/50	E	328128
Krypton E27 Clear							
40	230	50	40MK1/CL/E27	455	10/50	E	33333
60	230	50	60MK1/CL/E27	780	10/50	E	33334
75	230	55	75MK1/CL/E27	1030	10/50	E	33343
100	230	55	100MK1/CL/E27	1475	10/50	E	33332



Incandescent

Softlight Spherical

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Softlight Spherical E14 T-shape Opal							
25	230	45	25T45/SL/E14	200	10/50	F	32939
40	230	45	40T45/SL/E14	400	10/50	F	32948
60	230	45	60T45/SL/E14	660	10/50	F	32961

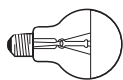
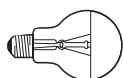


Spherical

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Spherical E14 Clear							
15	230	45	15D1/CL/E14	60	10/50	F	328219
25	230	45	25D1/CL/E14	200	10/50	F	328228
40	230	45	40D1/CL/E14	400	10/50	E	328236
60	230	45	60D1/CL/E14	660	10/50	E	328249
Spherical E27 Clear							
15	230	45	15D1/CL/E27	60	10/50	F	328215
25	230	45	25D1/CL/E27	200	10/50	F	328225
40	230	45	40D1/CL/E27	400	10/50	E	328233
60	230	45	60D1/CL/E27	660	10/50	E	328241
Spherical E14 Frosted							
15	230	45	15D1/FR/E14	60	10/50	F	328274
25	230	45	25D1/FR/E14	200	10/50	F	328282
40	230	45	40D1/FR/E14	400	10/50	E	328290
60	230	45	60D1/FR/E14	660	10/50	E	328299
Spherical E14 Frosted							
25	240	45	25D1/FR/E14	200	10/50	F	328286
40	240	45	40D1/FR/E14	400	10/50	E	328294
Spherical E27 Frosted							
15	230	45	15D1/FR/E27	60	10/50	F	328271
25	230	45	25D1/FR/E27	200	10/50	F	328279
40	230	45	40D1/FR/E27	400	10/50	E	328287
60	230	45	60D1/FR/E27	660	10/50	E	328296
Spherical B22 Frosted							
15	230	45	15D1/FR/B22	60	10/50	F	328272
25	230	45	25D1/FR/B22	200	10/50	F	328280
40	230	45	40D1/FR/B22	400	10/50	E	328288
60	230	45	60D1/FR/B22	660	10/50	E	328297
Spherical B22 Clear							
15	230	45	15D1/CL/B22	60	10/50	F	328216
25	230	45	25D1/CL/B22	200	10/50	F	328226
40	230	45	40D1/CL/B22	400	10/50	E	328234
60	230	45	60D1/CL/B22	660	10/50	E	328247
Spherical E14 Clear							
25	240	45	25D1/CL/E14	200	10/50	F	328232
40	240	45	40D1/CL/E14	400	10/50	E	328240



Incandescent



Coloured Spherical

Watts	Volts	Diameter mm	Colour	Product Description	Pack Quantity	Product Code
Coloured Spherical E14						
15	230	45	Red	15D1/R/E14	10/50	28309
15	230	45	Yellow	15D1/Y/E14	10/50	28319
15	230	45	Green	15D1/G/E14	10/50	28330
15	230	45	Blue	15D1/B/E14	10/50	28338
25	230	45	Red	25D1/R/E14	10/50	28315
25	230	45	Yellow	25D1/Y/E14	10/50	28324
25	230	45	Green	25D1/G/E14	10/50	28334
25	230	45	Blue	25D1/B/E14	10/50	28343
25	230	45	Orange	25D1/O/E14	10/50	28353
Coloured Spherical E27						
15	230	45	Red	15D1/R/E27	10/50	28304
15	230	45	Yellow	15D1/Y/E27	10/50	28316
15	230	45	Green	15D1/G/E27	10/50	28325
15	230	45	Blue	15D1/B/E27	10/50	28335
15	230	45	Orange	15D1/O/E27	10/50	28344
25	230	45	Red	25D1/R/E27	10/50	28312
25	230	45	Yellow	25D1/Y/E27	10/50	28320
25	230	45	Green	25D1/G/E27	10/50	28331
25	230	45	Blue	25D1/B/E27	10/50	28339
25	230	45	Orange	25D1/O/E27	10/50	28348

Crown Mirrored

Watts	Volts	Diameter mm	Colour	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Silver/Clear E27								
40	230	60	Silver	40A1/SB/E27	280	10/50	G	329000
60	230	60	Silver	60A1/SB/E27	490	10/50	G	329006
100	230	60	Silver	100A1/SB/E27	980	10/50	G	329012
Gold/Clear E27								
40	230	60	Gold	40A1/GB/E27	280	10/50	G	33329
60	230	60	Gold	60A1/GB/E27	490	10/50	G	47985
Silver/Clear E14								
25	230	45	Silver	25D1/SB/E14	190	10/50	G	329024
40	230	45	Silver	40D1/SB/E14	350	10/50	G	329026
Gold/Clear E14								
40	230	45	Gold	40E1/GB/E14	350	10/100	G	29031

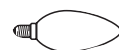
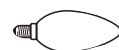
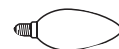
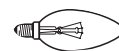
Pygmy

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Pygmy Clear E14							
15	230	26	15P1/CL/E14	90	1/50	F	328552
25	230	28	25P1/CL/E14	190	1/50	F	328554
Pygmy Frosted E14							
15	230	26	15P1/FR/E14	90	1/50	F	33218
25	230	28	25P1/FR/E14	190	1/50	F	33217
Pygmy Clear Oven E14							
15	230	22	15P1/CI/E14 OVEN	90	1/50	F	33229
25	230	28	25P1/CL/E14 OVEN	142	1/50	G	36882

Incandescent

Candle

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Candle Clear E14							
25	230	35	25C1/CL/E14	200	10/50	F	34814
40	230	35	40C1/CL/E14	400	10/50	E	328380
60	230	35	60C1/CL/E14	660	10/50	E	328391
Candle Frosted E14							
15	230	35	15C1/FR/E14	90	10/50	F	328399
25	230	35	25C1/FR/E14	200	10/50	F	328412
40	230	35	40C1/FR/E14	400	10/50	E	328425
60	230	35	60C1/FR/E14	660	10/50	E	328439
Candle Frosted E14							
25	240	35	25C1/FR/E14	200	10/50	F	328419
40	240	35	40C1/FR/E14	400	10/50	E	328430
Candle Softlight E14 Opal							
25	230	35	25C1/SL/E14	200	10/50	F	33035
40	230	35	40C1/SL/E14	400	10/50	F	33040
60	230	35	60C1/SL/E14	660	10/50	F	33042
Candle Frosted B22							
25	230	35	25C1/FR/B22	200	10/50	F	328418
40	230	35	40C1/FR/B22	400	10/50	E	328429
60	230	35	60C1/FR/B22	660	10/50	E	328441

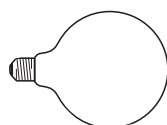
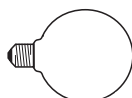


Twisted Candle

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Twisted Candle E14 Clear							
15	230	35	15TC1/CL/E14	90	10/50	F	32942
25	230	35	25TC1/CL/E14	200	10/50	F	36560
40	230	35	40TC1/CL/E14	400	10/50	E	36582
60	230	35	60TC1/CL/E14	660	10/50	E	36594
Twisted Candle E14 Frosted							
15	230	35	15TC1/FR/E14	90	10/50	F	42667
25	230	35	25TC1/FR/E14	200	10/50	F	36569
40	230	35	40TC1/FR/E14	400	10/50	E	36592
60	230	35	60TC1/FR/E14	660	10/50	E	36599



Incandescent

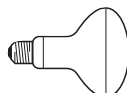
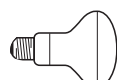


Softlight Globe

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Softlight Globe E14 Opal							
25	230	60	25G60/O/E14	180	1/20	F	36415
40	230	60	40G60/O/E14	290	1/20	G	36411
60	230	60	60G60/O/E14	490	1/20	G	36410
Softlight Globe E14 Opal							
40	230	60	40G60/O/E27	290	1/20	G	36398
60	230	60	60G60/O/E27	490	1/20	G	36414
Softlight Globe E27 Opal							
25	230	80	25G80/O/E27	180	1/20	F	36442
40	230	80	40G80/O/E27	290	1/20	G	328583
60	230	80	60G80/O/E27	490	1/20	G	328586
100	230	80	100G80/O/E27	890	1/20	G	328590
Softlight Globe E27 Opal							
40	230	95	40G95/O/E27	290	1/20	G	328628
60	230	95	60G95/O/E27	490	1/20	G	328646
75	230	95	75G95/O/E27	640	1/20	G	36443
100	230	95	100G95/O/E27	890	1/20	G	328671
Softlight Globe E27 Opal							
40	230	125	40G125/O/E27	290	1/20	G	328702
60	230	125	60G125/O/E27	490	1/20	G	328712
100	230	125	100G125/O/E27	890	1/20	G	328714
150	230	125	150G125/O/E27	1390	1/20	G	47996

Reflector

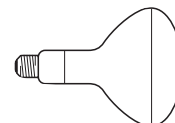
Watts	Volts	Diameter mm	Product Description	Peak Intensity CD	Pack Quantity	Product Code
Reflector E14						
25	230	39	25R39/E14	65	1/100	28733
30	230	39	30R39/E14	80	1/100	28741
Reflector E14						
25	230	50	25R50/E14	170	1/50	328739
40	230	50	40R50/E14	330	1/50	328746
Reflector E27						
40	230	63	40R63/E27	400	1/40	328756
60	230	63	60R63/E27	660	1/40	328762
Reflector E27						
40	230	80	40R80/E27	140	1/40	328773
60	230	80	60R80/E27	240	1/40	328782
75	230	80	75R80/E27	320	1/40	328793
100	230	80	100R80/E27	450	1/40	328802
Reflector E27						
75	230	95	75R95/E27	1000	1/32	328806
100	230	95	100R95/E27	1350	1/32	328813
150	230	95	150R95/E27	2000	1/32	328820



Incandescent

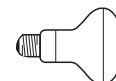
Infrared Reflector

Watts	Volts	Diameter mm	Product Description	Pack Quantity	Product Code
Hard Glass E27 Clear					
150	235/245	125	150R/IR/CL/E27	1/9	28720
250	235/245	125	250R/IR/CL/E27	1/9	28724
Hard Glass E27 Red Front					
150	235/245	125	150R/IR/R/E27	1/9	28731
250	235/245	125	250R/IR/R/E27	1/9	28735
Hard Glass E27 Satin					
150	235/245	125	150R/IR/SA/E27	1/9	28726
250	235/245	125	250R/IR/SA/E27	1/9	28729



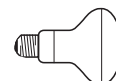
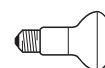
Neodymium Reflector

Watts	Volts	Diameter mm	Product Description	Pack Quantity	Product Code
Neodymium Reflector E14					
25	230	50	25R50/NDY/E14	1/25	36378
40	230	50	40R50/NDY/E14	1/25	36377
Neodymium Reflector E27					
40	230	63	40R63/NDY/E27	1/25	36376
60	230	63	60R63/NDY/E27	1/25	36375
Neodymium Reflector E27					
60	230	80	60R80/NDY/E27	1/25	36364
100	230	80	100R80/NDY/E27	1/25	36363

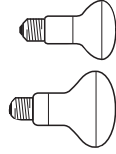


Coloured Reflector

Watts	Volts	Diameter mm	Colour	Product Description	Pack Quantity	Product Code
Coloured Reflector E14						
40	230	50	Red	40R50/R/E14	1/25	35605
40	230	50	Yellow	40R50/Y/E14	1/25	35612
40	230	50	Green	40R50/G/E14	1/25	35614
40	230	50	Blue	40R50/B/E14	1/25	35611
Coloured Reflector E27						
40	230	63	Red	40R63/R/E27	1/25	35630
40	230	63	Yellow	40R63/Y/E27	1/25	35631
40	230	63	Green	40R63/G/E27	1/25	35615
40	230	63	Blue	40R63/B/E27	1/25	35632
Coloured Reflector E27						
60	230	80	Red	60R80/R/E27	1/40	328825
60	230	80	Yellow	60R80/Y/E27	1/40	328833
60	230	80	Green	60R80/G/E27	1/40	328841
60	230	80	Blue	60R80/B/E27	1/40	328846



Incandescent

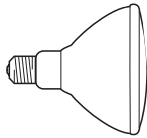
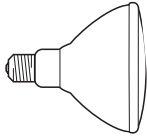


Pluslife Reflector

Watts	Volts	Diameter mm	Product Description	Pack Quantity	Product Code
Pluslife Reflector (3500hr) E27					
40	240	63	40R63/PL/E27	1/10	47978
Pluslife Reflector (3500hr) E27					
60	240	80	60R80/PL/E27	1/10	42830

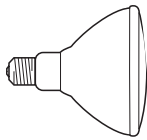
PAR 38 Reflector Watt-Miser®

Watts	Volts	Diameter mm	Colour	Product Description	Peak Intensity CD	Pack Quantity	Product Code
Watt-Miser® Spot - E27							
60	230	122		60PAR/SP/E27	2600	1/12	328876
80	230	122		80PAR/SP/E27	4000	1/12	318180
120	230	122		120PAR/SP/E27	7000	1/12	318175
Watt-Miser® Flood - E27							
60	230	122		60PAR/FL/E27	1100	1/12	328886
80	230	122		80PAR/FL/E27	1750	1/12	37477
120	230	122		120PAR/FL/E27	3000	1/12	37473
Coloured Watt-Miser® Flood - E27							
80	230	122	Red	80PAR/FL/R/E27		1/12	44774
80	230	122	Yellow	80PAR/FL/Y/E27		1/12	44783
80	230	122	Green	80PAR/FL/G/E27		1/12	44770
80	230	122	Blue	80PAR/FL/B/E27		1/12	44771



Infrared PAR 38 Reflector

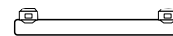
Watts	Volts	Diameter mm	Product Description	Pack Quantity	Product Code
Infrared PAR 38 Reflector - E27					
100	240	122	100PAR/IR/E27	1/10	35085
150	240	122	150PAR/IR/E27	1/10	35286
175	240	122	175PAR/IR/E27	1/10	42960



Incandescent

Striplight

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Striplight Opal 2S14							
35	230	30	35SL/O/300/2S14	220	1/25	G	33207
60	230	30	60SL/O/500/2S14	420	1/25	G	33202
Striplight Opal S14							
35	230	30	35SL/O/300/S14	220	1/25	G	33198
60	230	30	60SL/O/500/S14	420	1/25	G	33204

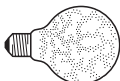
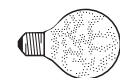
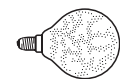
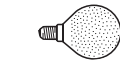
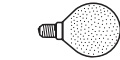
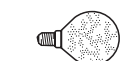


Tubular T28

Watts	Volts	Diameter mm	Product Description	Lumens	Pack Quantity	Energy Efficiency Class	Product Code
Tubular T28 Clear E14							
25	230/240	28	25T28/CL/E14	230	1/50	F	29986
40	230/240	28	40T28/CL/E14	415	1/50	E	29896
60	230/240	28	60T28/CL/E14	710	1/50	F	29956
Tubular T28 Clear B22							
25	230/240	28	25T28/CL/B22	230	1/50	F	29988
40	230/240	28	40T28/CL/B22	415	1/50	E	29885
60	230/240	28	60T28/CL/B22	710	1/50	F	29985



Incandescent



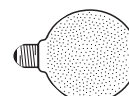
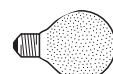
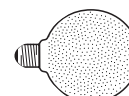
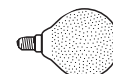
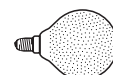
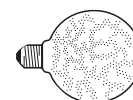
Decorative Range

Watts	Volts	Diameter mm	Product Description	Pack Quantity	Energy Efficiency Class	Product Code
GLS Flame E27						
25	230	60	25A1/Flame/E27	1/40	G	35803
40	230	60	40A1/Flame/E27	1/25	G	35805
60	230	60	60A1/Flame/E27	1/25	G	35807
Candle Flame E14						
25	230	35	25C1/Flame/E14	1/25	G	35729
40	230	35	40C1/Flame/E14	1/25	G	35733
Candle E14 Kroko-Gold						
25	230	35	25C1/KrokoGD/E14	1/25	F	36426
40	230	35	40C1/KrokoGD/E14	1/25	F	36347
Candle Ice Crystal E14 Opal						
25	230	35	25C1/IceCR-WH/E14	1/25	F	36423
40	230	35	40C1/IceCR-WH/E14	1/25	F	36346
Candle Ice Crystal E14 Amber						
25	230	35	25C1/IceCR-AM/E14	1/25	F	36424
40	230	35	40C1/IceCR-AM/E14	1/25	F	36345
Candle Twisted E14 Gold Glossed						
25	230	35	25TC1/GDGoss-CL/E14	1/25	G	36425
40	230	35	40TC1/GDGoss-CL/E14	1/25	G	36344
Candle Bent-tip E14 Frosted						
25	230	35	25C1/BentTipFR/E14	1/25	F	32873
40	230	35	40C1/BentTipFR/E14	1/25	E	32878
Spherical E14 Flame						
25	230	45	25D1/Flame/E14	1/25	G	35788
40	230	45	40D1/Flame/E14	1/25	G	35792
Spherical E14 Gold						
25	230	45	25WSPH/Lustergold/E14	1/25	F	36468
40	230	45	40WSPH/Lustergold/E14	1/25	F	36470
25	230	45	25WSPH/CMRgold/E14	1/25	F	36461
Spherical E14 Kroko-Gold						
25	230	45	25WSPH/KRO-Gold/E14	1/25	F	36462
40	230	45	40D1/KrokoGD/E14	1/25	F	36359
Spherical Ice Crystal E14 Opal						
25	230	45	25WSPH/Ice-WH/E14	1/25	F	36466
40	230	45	40D1/IceCR-WH/E14	1/25	F	36360
Spherical Ice Crystal E14 Amber						
25	230	45	25WSPH/Ice-WAM/E14	1/25	F	36467
40	230	45	40D1/IceCR-AM/E14	1/25	F	36357
Globe G60 E14 Kroko-Gold						
25	230	60	25G60/KrokoGD/E14	1/25	F	36444
40	230	60	40G60/KrokoGD/E14	1/25	G	36385
60	230	60	60G60/KrokoGD/E14	1/25	G	36446
Globe G60 E27 Kroko-Gold						
40	230	60	40G60/KrokoGD/E27	1/25	G	36407
60	230	60	60G60/KrokoGD/E27	1/25	G	36454
Globe G80 E27 Kroko-Gold						
40	230	80	40G80/KrokoGD/E27	1/25	G	36388

Incandescent

Decorative Range continued

Watts	Volts	Diameter mm	Product Description	Pack Quantity	Energy Efficiency Class	Product Code
Globe G95 E27 Kroko-Gold						
40	230	95	40G95/KrokoGold/E27	1/25	G	36387
60	230	95	60G95/KrokoGold/E27	1/25	G	36386
100	230	95	100G95/KrokoGold/E27	1/25	G	36460
Globe G60 E14 Gold						
25	230	60	25G60/Gold/E14	1/25	G	36452
40	230	60	40G60/Gold/E14	1/25	G	36453
60	230	60	60G60/Gold/E14	1/25	G	36457
60	230	60	60G60/Gold/E27	1/25	G	36458
Globe Ice Crystal G60 E14 Opal						
40	230	60	40G60/IceCR-WH/E14	1/10	G	36389
Globe Ice Crystal G60 E14 Amber						
25	230	60	25G60/IceCR-WH/E14	1/25	G	36450
40	230	60	40G60/IceCR-AM/E14	1/10	G	36390
Globe Ice Crystal G60 E27 Opal						
40	230	60	40G60/IceCR-WH/E27	1/10	G	36408
Globe Ice Crystal G80 E27 Opal						
40	230	80	40G80/IceCR-WH/E27	1/10	G	36391
60	230	80	60G80/IceCR-WH/E27	1/10	G	36393
Globe Ice Crystal G95 E27 Opal						
40	230	95	40G95/IceCR-WH/E27	1/10	G	36395
60	230	95	60G95/IceCR-WH/E27	1/10	G	36396
100	230	95	100G95/IceCR-WH/E27	1/10	G	36397
Globe Ice Crystal G60 E27 Amber						
25	230	60	25G60/IceCR-AM/E14	1/25	G	36451
40	230	60	40G60/IceCR-AM/E27	1/10	G	36409
Globe Ice Crystal G80 E27 Amber						
40	230	80	40G80/IceCR-AM/E27	1/10	G	36399
60	230	80	60G80/IceCR-AM/E27	1/10	G	36401
Globe Ice Crystal G95 E27 Amber						
40	230	95	40G95/IceCR-AM/E27	1/10	G	36402
60	230	95	60G95/IceCR-AM/E27	1/10	G	36405
100	230	95	100G95/IceCR-AM/E27	1/10	G	32847
Eldea E14 Opal						
25	230		25ELDEA/O/E14	1/25	F	32895
40	230		40ELDEA/O/E14	1/25	F	32906
Elroyal E27 Opal						
40	230		40ELROYAL/O/E27	1/25	F	36406



Halogen lamps

GE invented and marketed the world's first halogen lamp in 1958.

Halogen lamps provide outstanding light quality - the crisp white light delivers superior colour reproduction. They are more energy efficient than conventional incandescent lamps and offer a longer life - all within a compact size.

Other features include outstanding beam control, UV control, heat reflective coatings that protect display items and a unique 'twist and lock' cap which makes installation easy and safe.



Close beam control and excellent colour reproduction make halogen the lamp of choice for display lighting

Halogen

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Product identification

The following glossary of terms and descriptions can help you when checking halogen lamp specifications and explains how to use the order codes when ordering products. Within each product line, lamps are divided into families - within families, lamps are listed by wattage.

Watts:

Energy used. To find actual energy used (kWh) multiply power (watts shown) x time divided by 1000

Product Description:

The lamp's identification code

Product Code:

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

Volts:

Each lamp's voltage is listed

Beam Spread Degrees:

The angle of the cone of light produced by a reflector lamp at 50% of its intensity

Pack Quantity:

The number of lamps in one box

Precise™ MR16 ConstantColor™

Watts	Volts	Product Description	Peak Beam Candelas	Beam Spread Degrees	Rated Average Life Hours	Pack Qty	Product Code
Dichroic Mirror - 50 mm Closed - Cap GU5.3 - Constant Colour Temperature 2900°K							
20	12	ESX/CG	3250	13	5000	10	20858
Dichroic Mirror - 50 mm Closed - Cap GU5.3 - Constant Colour Temperature 2900°K							
20	12	BAB/CG	500	40	5000	10	20857

Lamp:

Description of lamp type, and product features

Peak Beam Candelas:

Luminous intensity of the lamp beam expressed in candelas

Rated Average Life:

The point in time when 50% of installed lamps are still burning

BAB / CG

ANSI -Code

Product Feature, eg. Cover glass

If you're looking for halogen, aim for a Precise solution



Precise MR16



Precise MR11

- *Cool, white light, precise beam control, excellent colour performance and a lamp life of up to 6,000 hours.*
- *Ideal for retail display lighting, decorative lighting and spotlighting of individual features - including heat sensitive items.*
- *Choose from a wide range of beam angles and select Precise MR16 lamps for ultra - violet control.*

Halogen uplighters, downlighters and spotlights at the Bang & Olufsen Centre, Copenhagen, Denmark.

Applications:

retail display lighting, decorative lighting and spotlighting of individual features.



Choose:

Precise ConstantColor

for consistent light quality and exceptional long life.

Precise Bright

for outstanding light output in a mid range lamp.

Precise Alutech

for all your heat sensitive halogen fixtures.

Precise MR11

for high output, light quality and long life in an extra compact form.

Range of beam angles

GE Precise MR16 lamps offer a choice of nominal beam angles from 8° to 60°. The range of beam angles can be used to either highlight single features with a tight focus or provide a wash of ambient lighting, with a variety of effects achievable with intermediate beams.

8° angle

24° angle

36° angle

60° angle



Precise™ MR16 & MR11



Precise[™] ConstantColor[™]

The long lasting premium quality halogen lamp.

The Precise ConstantColor lamp features revolutionary GE Thin Film Technology to give consistent light output for up to the 6000 hour life of the lamp. The advanced coating is designed to withstand temperatures of up to 500°C, making it the ideal choice for long-term reliability and consistent light quality.



- Up to 6000 hours life
- 99-98% Lumen maintenance
- Double sided dichroic coating
 - With UV control
- The most consistent light output available



Precise[™] Bright

Outstanding light output and beam quality in a mid range lamp.

Precise Bright sets new performance standards for mid-range halogen lamps, offering outstanding long life for a mid-range product. Its advanced, computer-designed reflector gives a smooth beam and outstanding light output compared to similar lamps. Precise Bright is available in both open and closed forms.



- Up to 4000 hours life
- Outstanding light output and beam quality from a mid-range lamp
 - Upgraded reflector
- UV control in both open and closed formats



*Precise*TM AlutechTM

The perfect choice for heat sensitive halogen fixtures.

For many years finding a halogen lamp suitable for high technology electronic fixtures was a problem. Precise Alutech is the answer. With a GE developed aluminium coating, almost all of the heat is reflected away from the fixture. Throwing heat forward has advantages in downlighters like minimising heat build up in ceiling voids.



*Precise*TM MR11

The extra compact, high performance halogen lamp.

GE Precise MR11's pack the high output, light quality and long life of halogen into an extra compact form, making them ideal where space is at a premium.



- Heat reflected forward
- Ideal for heat sensitive fixtures
 - 3000 hours life
 - With UV control



- Extra-compact 35 mm size - perfect for lighting cabinet displays
 - 3500 hours life
- Closed lamps with UV control

Halogen

Precise™ MR16 ConstantColor™



Watts	Volts	Product Description	Peak Beam Candelas	Beam Spread Degrees	Rated Average Life Hours	Pack Qty	Product Code
Dichroic Mirror - 50 mm Closed - Cap GU5.3 - Constant Colour Temperature 2900°K, UV control							
20	12	ESX/CG	3350	12	5000	10	20858
20	12	BAB/CG	475	40	5000	10	20857
Dichroic Mirror - 50 mm Closed - Cap GU5.3 - Constant Colour Temperature 3000°K, UV control							
35	12	FRB/CG	7500	12	5000	10	20864
35	12	FRA/CG	3200	20	5000	10	20860
35	12	FMW/CG	900	40	5000	10	20859
Dichroic Mirror - 50 mm Closed - Cap GU5.3 - Constant Colour Temperature 3050°K, UV control							
50	12	EXT/CG	8500	14	6000	10	20872
50	12	EXZ/CG	2800	25	6000	10	20871
50	12	EXN/CG	1450	40	6000	10	20867
50	12	FNV/CG	850	55	6000	10	20865
71	12	EYF/CG	9800	15	4000	10	20876
71	12	EYJ/CG	4600	25	4000	10	20874
71	12	EYC/CG	1950	42	4000	10	20873

20W

35W

50W

71W

m	ESX/CG		FRB/CG		EXT/CG		EYF/CG	
	12°	lux	12°	lux	14°	lux	15°	lux
1	.20	3350	.20	7500	.25	8500	.25	9800
2	.40	838	.40	1875	.50	2125	.50	2450
3	.60	372	.60	833	.70	944	.70	1089
4	.80	209	.80	469	1.00	531	1.00	613
5	1.00	134	1.00	300	1.25	340	1.25	392

m	FRA/CG		EXZ/CG		EYJ/CG	
	20°	lux	25°	lux	25°	lux
1	.35	3200	.40	2800	.40	4600
2	.70	800	.90	700	.90	1150
3	1.10	356	1.30	311	1.30	511
4	1.40	200	1.80	175	1.80	298
5	1.75	128	2.25	112	2.25	184

m	BAB/CG		FMW/CG		EXN/CG		EYC/CG	
	40°	lux	40°	lux	40°	lux	42°	lux
1	.70	475	.70	900	.70	1450	.90	1950
2	1.50	119	1.50	225	1.50	363	1.50	488
3	2.20	53	2.20	100	2.20	161	2.30	217
4	2.90	30	2.90	56	2.90	91	3.10	122
5	3.62	19	3.62	36	3.62	58	3.87	78

m	FNV/CG	
	55°	lux
1	1.00	850
2	2.00	213
3	3.10	94
4	4.20	53
5	5.20	34

These cones are for closed lamps.

Halogen

Precise™ Bright MR16

Watts	Volts	Product Description	Peak Beam Candelas	Beam Spread Degrees	Rated Average Life Hours	Pack Qty	Product Code
Dichroic Mirror - 50 mm Open - Cap GU5.3 - Constant Colour Temperature 3000°K, UV control							
20	12	M69/BAB	500	36	4000	10	330712
35	12	M70/FRA	3660	24	4000	10	330713
35	12	M81/FMW	1620	36	4000	10	330716
50	12	M50/EXZ	5920	24	4000	10	330709
50	12	M58/EXN	2600	36	4000	10	330710
50	12	M80/FNV	1190	60	4000	10	330715



Watts	Volts	Product Description	Peak Beam Candelas	Beam Spread Degrees	Rated Average Life Hours	Pack Qty	Product Code
Dichroic Mirror - 50 mm Closed - Cap GU5.3 - Constant Colour Temperature 3000°K, UV control							
20	12	M268/ESX/CG	6000	8	4000	10	330736
20	12	M269/BAB/CG	450	36	4000	10	330737
35	12	M270/FRA/CG	2950	24	4000	10	330738
35	12	M281/FMW/CG	1300	36	4000	10	330745
50	12	M249/EXT/CG	10100	8	4000	10	330725
50	12	M250/EXZ/CG	4750	24	4000	10	330734
50	12	M258/EXN/CG	2100	36	4000	10	330735
50	12	M280/FNV/CG	950	60	4000	10	330744



20W

35W

50W

m	M268/ESX/CG		M249/EXT/CG	
	8°	lux	8°	lux
1	.14	6000	.14	10100
2	.28	1500	.28	2525
3	.42	667	.42	1122
4	.56	375	.56	631
5	.70	240	.70	404

m	M270/FRA/CG		M250/EXZ/CG	
	24°	lux	24°	lux
1	.43	2950	.43	4750
2	.85	738	.85	1188
3	1.28	328	1.28	528
4	1.70	184	1.79	297
5	2.13	118	2.13	190

m	M269/BAB/CG		M281/FMW/CG		M258/EXN/CG	
	36°	lux	36°	lux	36°	lux
1	.65	450	.65	1300	.65	2100
2	1.30	113	1.30	325	1.30	525
3	1.95	50	1.95	144	1.95	233
4	2.60	28	2.60	81	2.60	131
5	3.25	18	3.25	52	3.25	84

m	M280/FNV/CG	
	60°	lux
1	1.15	950
2	2.31	238
3	3.46	106
4	4.62	59
5	5.77	38

These cones are for closed lamps. Open lamps' values typically 10% higher.

Halogen

Precise™ Alutech™ MR16



Watts	Volts	Product Description	Peak Beam Candelas	Beam Spread Degrees	Rated Average Life Hours	Pack Qty	Product Code
Aluminised Coating - 50 mm Closed - Cap GU5.3 - Constant Colour Temperature 3000°K, UV control							
20	12	M269/BAB/CG/AL	450	36	3000	10	35472
35	12	M281/FMW/CG/AL	1300	36	3000	10	35471
50	12	M258/EXN/CG/AL	1800	36	3000	10	35470
50	12	M280/FNW/CG/AL	700	60	3000	10	35467

20W

35W

50W

m	M269/BAB/CG/AL		M281/FMW/CG/AL		M258/EXN/CG/AL	
	36°	lux	36°	lux	36°	lux
1	0.65	450	0.65	1300	0.65	1800
2	1.30	113	1.30	325	1.30	450
3	1.95	50	1.95	144	1.95	200
4	2.60	28	2.60	81	2.69	113
5	3.25	18	3.25	52	3.25	72

m	M280/FNW/CG/AL	
	60°	lux
1	1.15	700
2	2.31	175
3	3.46	78
4	4.62	44
5	5.77	28

These cones are for closed lamps.

Precise™ MR11



Watts	Volts	Cap	Product Description	Peak Beam Candelas	Beam Spread Degrees	Rated Average Life Hours	Pack Qty	Product Code
Dichroic Mirror - 35 mm Open - Constant Colour Temperature 2900°K								
12	12	GU4	M64/FTA	4400	8	2000	10	30759
20	12	GU4	M52/FTB	4400	10	3500	10	30755
20	12	GU4	M51/FTC	2000	17	3500	10	30754
20	12	GU4	M62/FTD	550	26	3500	10	30773
35	12	GU4	M65/FTE	7000	10	3500	10	30760
35	12	GU4	M66/FTF	2300	21	3500	10	30774
35	12	GU4	M199/FTH	1300	26	3500	10	30890



Dichroic Mirror - 35 mm Open - Constant Colour Temperature 2900°K -B15D Cap

20	12	B15D	M54/FST	1760	16	3500	10	30778
20	12	B15D	M63/FSV	600	30	3500	10	30780



Dichroic Mirror - 35 mm Closed - Constant Colour Temperature 2900°K, UV control

12	12	GU4	M264/FTA/CG	3960	8	2000	10	30768
20	12	GU4	M252/FTB/CG	3960	10	3500	10	30763
20	12	GU4	M251/FTC/CG	1800	17	3500	10	30762
20	12	GU4	M262/FTD/CG	490	26	3500	10	30775
35	12	GU4	M265/FTE/CG	6300	10	3500	10	30769
35	12	GU4	M266/FTF/CG	2070	21	3500	10	30777

Halogen

Precise™ MR11

	12W		20W		20W		35W	
m	M64/FTA		M52/FTB				M65/FTE	
	8°	lux	10°	lux			10°	lux
1	.14	4400	.17	4400			.17	7000
2	.28	1100	.35	1100			.35	1750
3	.42	489	.52	483			.52	778
4	.56	275	.70	275			.70	438
5	.70	176	.87	176			.87	280

m	M51/FTC		M54/FST		M66/FTF	
	17°	lux	16°	lux	21°	lux
1	.30	2000	.28	1760	.37	2300
2	.60	500	.56	440	.74	575
3	.90	222	.84	196	1.11	256
4	1.20	125	1.12	110	1.48	144
5	1.49	80	1.41	70	1.85	92

m	M62/FTD		M63/FSV		M199/FTH	
	26°	lux	30°	lux	26°	lux
1	.46	550	.54	600	.46	1300
2	.92	138	1.07	150	.92	325
3	1.39	61	1.61	67	1.39	144
4	1.85	34	2.14	38	1.85	81
5	2.31	22	2.68	24	2.31	52

These cones are for open lamps.

	12W		20W		20W		35W	
m	M264/FTA/CG		M252/FTB/CG				M265/FTE/CG	
	8°	lux	10°	lux			10°	lux
1	.14	3960	.17	3960			.17	6300
2	.28	990	.35	990			.35	1575
3	.42	440	.52	440			.52	700
4	.56	248	.70	248			.70	394
5	.70	158	.87	158			.87	252

m	M251/FTC/CG		M266/FTF/CG	
	17°	lux	21°	lux
1	.30	1800	.37	2070
2	.60	450	.74	518
3	.90	200	1.11	230
4	1.20	113	1.48	129
5	1.49	72	1.85	83

m	M262/FTD/CG	
	26°	lux
1	.46	490
2	.92	123
3	1.39	54
4	1.85	31
5	2.31	20

These cones are for closed lamps.



Twist & Lock



TAL 50



Installing halogen? GE's Twist & Lock make it easy

GE's Twist And Lock's tough mechanical bond and greater electrical contact between lamp and base means:

No retaining springs or rings to fit or release - offering faster lamp installation and replacement;

No risk of arcing - improving electrical reliability and safety.



TAL 50 lamps are 50 mm dichroic mirror lamps with ConstantColor coatings to give exceptional long life and consistent light quality.

3,500 hours life

up to 50% longer than standard dichroic lamps.

98% lumen maintenance

producing near maximum light output even at 3,500 hours.

Consistent white light

with no colour shift throughout the rated life of the lamp.

TAL 100 lamps are 100 mm reflector lamps designed for long life and extra high light intensity.

Up to 3,500 hours life

Exceptional light intensity

up to 17% higher than the nearest compatible lamp.

- *GE's unique Twist and Lock (TAL) system enables you to locate the lamp with one simple, foolproof action.*
- *The first low voltage halogen lamp designed for easy installation.*
- *No more installation problems or poor connections caused by bent or broken connecting pins, so no more wasted lamps.*

TAL downlighters welcome visitors to Timothy Guy Design's studio in Truro, UK.

Applications:

retail, displays, reception areas and residential interior lighting.

Halogen

TAL 50 ConstantColor™

Watts	Volts	Product Description	Peak Beam Candelas	Beam Spread Degrees	Rated Average Life Hours	Pack Qty	Product Code
Dichroic Mirror - 50 mm Closed - Cap GU 7 - Colour Temperature 2900°K, UV control							
20	12	TAL 414/CC	4500	11	3500	10	30927
20	12	TAL 415/CC	900	24	3500	10	30928
20	12	TAL 416/CC	450	36	3500	10	30931
35	12	TAL 417/CC	8100	8	3500	10	30932
35	12	TAL 418/CC	3240	18	3500	10	30933
35	12	TAL 419/CC	873	38	3500	10	30934
50	12	TAL 420/CC	8000	12	3500	10	30901
50	12	TAL 421/CC	3300	21	3500	10	30900
50	12	TAL 422/CC	900	43	3500	10	30899
50	12	TAL 423/CC	630	60	3500	10	30935

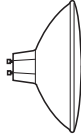


		20W		35W		50W	
		TAL 414		TAL 417		TAL 420	
m		11°	lux	8°	lux	12°	lux
1		.19	4500	.14	8100	.21	8000
2		.39	1125	.28	2025	.42	2000
3		.58	500	.42	900	.63	889
4		.77	281	.56	506	.84	500
5		.96	180	.70	324	1.05	320
		TAL 415		TAL 418		TAL 421	
m		24°	lux	18°	lux	21°	lux
1		.43	900	.32	3240	.37	3300
2		.85	225	.63	810	.74	825
3		1.28	100	.95	360	1.11	367
4		1.70	56	1.27	203	1.48	206
5		2.13	36	1.58	130	1.85	132
		TAL 416		TAL 419		TAL 422	
m		36°	lux	38°	lux	43°	lux
1		.65	450	.69	873	.79	900
2		1.30	113	1.38	218	1.58	225
3		1.95	50	2.07	97	2.36	100
4		2.60	28	2.75	55	3.15	56
5		3.25	18	3.44	35	3.94	36
				TAL 423			
m				60°	lux		
1				1.15	630		
2				2.31	158		
3				3.46	70		
4				4.62	39		
5				5.77	25		

These cones are for closed lamps.

Halogen

TAL 100

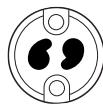


Watts	Volts	Product Description	Peak Beam Candelas	Beam Spread Degrees	Rated Average Life Hours	Pack Qty	Product Code
Metal Reflector - 100 mm Closed - Cap GU 7 - Colour Temperature 3000°K, UV control							
35	12	TAL 138	33000	4	3500	20	29408
50	12	TAL 139	48000	6	3500	20	29409
50	12	TAL 140	3300	21	3500	20	29410



	35W		50W		50W	
	TAL138		TAL139		TAL140	
m	4°	lux	6°	lux	21°	lux
1	.07	33000	.1	48000	.37	3330
2	.14	8250	.21	12000	.74	825
3	.21	3667	.31	5333	1.11	367
4	.28	2063	.42	3000	1.48	206
5	.35	1320	.52	1920	1.85	132
Beam ø	50%		50%		50%peak	

Lampholders - Twist and Lock - TAL



Lead Length	Product Description	Height of Socket mm	Pack Qty	Product Code
Lampholders - Twist and Lock - TAL				
150	GL1252 BR2V/150	11	500	31819
250	GL1252 BR2V/250	11	500	31646
150	GL1252 BR8V/150	16.5	500	32078
250	GL1252 BR8V/250	16.5	500	32074

All the power, quality and precision of halogen - with UV control



UV Control Capsules

- *The ultra violet light emitted by standard halogen lamps can cause fading or bleaching of sensitive display items.*
- *GE's UV Control Capsules significantly reduce the effect of bleaching by minimising UV-B and UV-C radiation.*

Choose ultra violet control for accent lighting of light sensitive display items.

Applications:

retail, display and task lighting.

GE's UV Control Capsules give maximum light output and colour quality.

Range includes axial filament types for use in linear miniature reflectors and uplighters, providing:

Wide, smooth beam with accurate light cut-off - perfect for uniform lighting effects.

Maximum versatility - common light-centres across a range of wattages let you use one light fitting design for a range of applications.

UV Control Capsules

Halogen

Low Voltage Halogen Capsules UV-Control

Watts	Volts	Product Description	Cap	Filament	Max Length mm	Lumens	Pack Qty	Light centre length mm	Rated Average Life Hours	Product Code
Hard Glass Capsules										
5	12	M9	G4	T	31	60	20	19.5	2000	42959
10	12	M11	G4	T	31	140	20	19.5	2000	34674



Halogen Capsules

10	6	M29/ESA/Q10 G4	G4	T	33	200	20	19.5	100	34720
10	6	M42/Q10 G4	G4	T	33	140	20	19.5	1500	34728
20	6	M34/FHE/Q20 G4	G4	T	33	350	20	19.5	2000	34719
20	6	M30/ESB/Q20 G4	G4	T	33	450	20	19.5	100	34718
20	12	M47/Q20 G4	G4	T	33	380	20	19.5	2000	34715
20	12	M35/Q20 G4	G4	T	33	400	20	19.5	250	34714
20	12	M76/Q20/GY6.35	GY6.35	A	44	300	20	30.0	3000	34712
20	12	M312/Q20/GY6.35	GY6.35	A	44	300	20	30.0	2000	34713
35	6	M116/Q35/GY6.35	GY6.35	A	44	600	20	30.0	2000	34711
35	12	M75/Q35/GY6.35	GY6.35	A	44	600	20	30.0	3000	34710
35	12	M95/Q35/GY6.35	GY6.35	T	44	550	20	30.0	3000	34708
50	12	M74/Q50/GY6.35	GY6.35	A	44	900	20	30.0	3000	34703
50	12	M32/Q50 GY6.35	GY6.35	T	44	850	20	30.0	3000	34702
50	24	M89/Q50/GY6.35	GY6.35	T	44	750	20	30.0	2000	34684
75	12	M73/Q75/GY6.35	GY6.35	A	44	1350	20	30.0	3000	34683
75	12	M313/Q75/GY6.35	GY6.35	T	44	1350	20	30.0	2000	34682
100	12	M28/EVA/Q100 GY6.35/12	GY6.35	T	44	2100	20	30.0	2000	34676
100	12	M180	GY6.35	A	44	2150	20	30.0	3000	34664
100	24	M67/Q100 GY6.35/24	GY6.35	T	44	2000	20	30.0	2000	34663



Low Pressure Halogen Capsules

10	12	Q10T2,5/12V G4	G4	A	33	140	20	22	2000	35705
20	12	Q20T2,5/12V G4	G4	A	33	320	20	22	2000	35710
20	12	Q20T3/12V GY6.35	GY6.35	A	44	300	20	30	2000	35696
35	12	Q35T3/12V GY6.35	GY6.35	A	44	600	20	30	2000	35699
50	12	Q50T3/12V GY6.35	GY6.35	A	44	950	20	30	2000	35700
75	12	Q75T3/12V GY6.35	GY6.35	A	44	1350	20	30	2000	35701

Filament: T - transversal and A - axial

Choose Halogen-IR technology and start saving money



Halogen-IR Linear

- *GE Halogen-IR (Infra-red) lamps use a unique GE POW-IR - Film coating that increases lamp efficiency by more than 25%.*
- *These lamps also turn invisible infra-red light into extra visible light.*



'The Old Bank' Happit store façade, energy-saving exterior floodlighting in London, UK.

Applications:
retail, displays, reception areas and exterior floodlighting.

GE's Halogen IR is one of the most efficient halogen lamps in the world.

A whiter light with excellent colour rendering. Maximum light where you need it.

GE's HIR Linear offers you:

- Up to 25% energy savings** for the same light output.
- Up to 25% less heat output** than a standard halogen linear.

Halogen-IR™ Linear

Halogen

Standard Double Ended Linear

Watts	Volts	Product Description	Length Cap	Length mm	Diameter mm	Quick Acting Fuse	Lumens	Rated Average Life Hours	Pack Qty	Energy Efficiency Class	Product Code
Clear											
100	230	K14/Q100 T3/CL	R7s	78	10	-	1600	2000	10	D	29112
150	230	K12/Q150 T3/CL	R7s	78	10	-	2600	2000	10	D	29123
150	230	K28	R7s	117	8	2A	2100	2000	10	E	30881
200	230	K11/Q200 T3/CL	R7s	117	8	2A	3100	2000	10	E	29134
200	230	K27	R7s	78	10	-	3400	2000	10	D	35034
250	230	K15/Q250 T3/CL	R7s	78	10	-	4000	2000	10	E	29149
250	230	K32/Q250 T2,5/CL	R7s	117.6	8	2A	4000	2000	10	E	30884
300	230	K9/Q300 T3/CL	R7s	117	8	2A	5100	2000	10	E	29159
500	230	K1/Q500 T3/CL	R7s	117	10	4A	9800	2000	10	-	29165
750	230	K3/Q750 T3/CL	R7s	189.1	10	6.3A	15000	2000	10	-	29173
1000	230	K4/Q1000 T3/CL	R7s	189.1	10	6.3A	21000	2000	10	-	29180
1000	230	K10	R7s	254.1	10	6.3A	21000	2000	10	-	43711
1500	230	K5/Q1500 T3/CL	R7s	256.1	10	10A	32000	1000	10	-	29184
2000	230	K6/Q2000 T3/CL	Fa4	333.0	10	10A	44000	2000	10	-	29190
2000	230	K8/Q2000 T3/CL	R7s	333.0	10	10A	44000	1000	10	-	30886

78mm lamps are internally fused, and universal operating position.

Other lamps operating position horizontal $\pm 4^\circ$.

HIR Double Ended Linear

Watts	Volts	Product Description	Length Cap	Length mm	Diameter mm	Quick Acting Fuse	Lumens	Rated Average Life Hours	Pack Qty	Energy Efficiency Class	Product Code
Halogen IR™											
225	230	K9/Q225 T3/230 HIR	R7s	117	10	2A	4800	2000	10	C	31577
375	230	K1/Q375 T3/230 HIR	R7s	117	10	2A	9000	2000	10	C	31598

Operating position horizontal $\pm 4^\circ$.

Upgrade to GE Halogen using your existing light fittings



Halogen PAR 30

- *GE Halogen PAR lamps are a range of direct replacements for standard incandescent reflector lamps.*
- *GE Halogen PAR lamps run on mains voltage, so you no longer need transformers or extra wiring to enjoy the crisp white light and energy-saving properties of halogen.*

Halogen PAR puts the performance of halogen into your existing light fittings.

Applications:

retail, displays, museums, conference rooms, private offices and residential interior lighting.

GE PAR 20 and PAR 30 lamps are cost-saving direct replacements for 63 mm and 95 mm incandescent reflector lamps.

They offer you:

Up to 150% longer life

Up to 50% energy savings

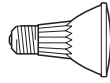
Cool white light with excellent colour rendering and a cool beam.

Maximum light where you need it.

Halogen PAR

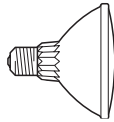
Halogen

PAR 20



Watts	Volts	Product Description	Max Length mm	Diameter mm	Peak Beam Candelas	Pack Qty	Rated Average Life Hours	Product Code
PAR 20 - Cap E27 - Reflector Spot 10°							2900°K	
50	230	50PAR20/230/SP	90.5	65	6900	15	2500	34863
PAR 20 - Cap E27 - Reflector Flood 25°							2900°K	
50	230	50PAR20/230/FL	90.5	65	2200	15	2500	34866

PAR 30



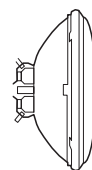
Watts	Volts	Product Description	Max Length mm	Diameter mm	Peak Beam Candelas	Pack Qty	Rated Average Life Hours	Product Code
PAR 30 - Cap E27 - Reflector Spot 10°							2900°K	
75	230	75PAR30/230/SP	90.5	97	6900	15	2500	32465
100	230	100PAR30/230/SP	90.5	97	10000	15	2500	32483
PAR 30 - Cap E27 - Reflector Flood 30°							2900°K	
75	230	75PAR30/230/FL	90.5	97	2200	15	2500	32463
100	230	100PAR30/230/FL	90.5	97	3500	15	2500	32484

m	75W		100W		75W		100W	
	Spot		Spot		Flood		Flood	
	10°	lux	10°	lux	30°	lux	30°	lux
1	.17	6900	.17	10000	.53	2200	.53	3500
2	.35	1725	.35	2500	1.07	650	1.07	875
3	.52	765	.52	1110	1.80	246	1.80	390
4	.70	430	.70	625	2.14	140	2.14	220

Halogen

PAR 36

Watts	Volts	Product Description	Length mm	Diameter mm	Peak Beam Candelas	Pack Qty	Rated Average Life Hours	Product Code
PAR 36 - Screw Terminal Cap - Reflector 3000°K								
35	12	35PAR36/VNSP/H	70	114	25000	12	4000	19873
35	12	35PAR36/WFL/H	70	114	9000	12	4000	19877
50	12	50PAR36/WFL/H	70	114	1300	12	4000	19880



35W

35W

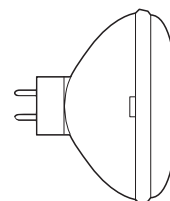
50W

m	VNSP/H		WFL/H		WFL/H	
	5°	lux	30°	lux	30°	lux
1	.09	25000	.57	900	.57	1300
2	.17	6250	1.15	225	1.15	325
3	.26	2780	1.72	100	1.72	140
4	.35	1560	2.29	55	2.29	80
5	.44	1000	2.87	35	2.87	50



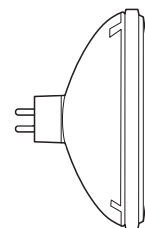
PAR 56

Watts	Volts	Product Description	Approx Beam Spread		Peak Beam Candelas	Pack Qty	Rated Average Life Hours	Product Codex
			10% Peak CD	50% Peak CD				
PAR 56 - Cap GX16d Reflector 2950°K								
500	120	Q500PAR56NSP	32 x 15	13 x 8	96000	6	4000	43494
500	120	Q500PAR56MFL	42 x 20	26 x 10	43000	6	4000	43495
500	120	Q500PAR56WFL	66 x 34	44 x 20	19000	6	4000	43496



PAR 64

Watts	Volts	Product Description	Approx Beam Spread		Peak Beam Candelas	Pack Qty	Rated Average Life Hours	Product Code
			10% Peak CD	50% Peak CD				
PAR 64 - Cap GX16d Reflector 3000°K								
1000	120	Q1000PAR64NSP	31 x 14	15 x 8	200000	6	4000	43497
1000	120	Q1000PAR64MFL	45 x 22	28 x 12	80000	6	4000	43498
1000	120	Q1000PAR64/WFL	75 x 45	48 x 24	33000	6	4000	43499



HaloGlobe™ & Halo BTT™



HaloGlobe



Halo BTT



Beauty and cost-saving for your decorative lights

- *GE HaloGlobe and Halo BTT lamps combine the efficiency, economy and performance of halogen with classic lamp good looks.*
- *Higher light output and improved colour rendering make them ideal in the most demanding locations.*

GE HaloGlobe - the replacement for Decor 95 mm lamps is available in clear and white, 60, 100 and 150W.

GE Halo BTT - the replacement for GLS lamps is available in clear, 60 and 100W.

Crisper, whiter light
with improved colour rendering.

Improved efficiency
with up to 50% more light for the same energy consumption.

Save maintenance costs
with up to two times longer life.

Versatility and flexibility
You can install these lamps at any angle with no reduction in lamp life.

Easy installation
HaloGlobe and Halo BTT - with their outer glass covers, can be handled like any ordinary GLS lamp.

HaloGlobe lamps complement the classical architecture of the Cafe Hungaria, Budapest, Hungary.

Applications:

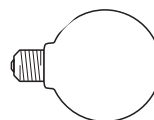
hotels, pubs, restaurants, offices, retail and residential.

Halogen

HaloGlobe

Watts	Volts	Product Description	Max Length mm	Lumens	Pack Qty	Rated Average Life Hours	Energy Efficiency Class	Product Code
Halogen- Cap E27 - Opal - Diameter 95 mm								
60	230	Halo G95/60 ES/230WH	138.5	700	10	2000	E	32026
100	230	Halo G95/100ES/230WH	138.5	1350	10	2000	E	32032
150	230	Halo G95/150ES/230WH	138.5	2100	10	2000	E	32035

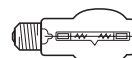
Operating position: Universal.



Halo BTT™

Watts	Volts	Product Description	Cap	Max Length mm	Diameter mm	Lumens	Rated Average Life Hours	Finish	Pack Qty	Energy Efficiency Class	Product Code
Halo BTT™ - Temperature 2850°K											
60	230	Halo BTT 60 ES 230 CL	E27	118	47	820	2000	clear	10	D	37808
100	230	Halo BTT 100 ES 230 CL	E27	118	47	1500	2000	clear	10	D	37811
60	230	Halo BTT 60 ES 230 WH	E27	118	47	700	2000	opal	10	E	37809
100	230	Halo BTT 100 ES 230 WH	E27	118	47	1350	2000	opal	10	E	37805

Operating position: Universal.



HaloT

Watts	Volts	Product Description	Cap	Max Length mm	Diameter mm	Lumens	Rated Average Life Hours	Finish	Pack Qty	Product Code
Halo T - Temperature: 500W - 2900°K, 1000W - 2850°K										
500	230	Halo T38/500W/E40/230	E40	215	38	9500	2000	clear	10	32106
1000	230	Halo T38/1000W/E40/230	E40	280	38	21000	2000	clear	10	32108

Operating position: Horizontal ±4°.



Halogen lamps

Halogen lamps provide a compact, high output light source popular for accent, display and general lighting applications in a wide variety of commercial, industrial and residential environments.

Choosing the right lamp

To help you achieve the most effective spread and level of illumination for your particular application, use the performance cones shown in this catalogue.

Assessing performance cones

Performance cones show the area, strength and distribution of light produced by each lamp. This varies according to the level of illuminance produced by the lamp (lux), the height of the lamp above the object being illuminated, and the beam angle of the lamp selected.

Selecting power and beam

Comparing performance cones lets you select the correct lamp for your needs. For example, GE's most commonly used mirror lamp, the 50W EXZ Precise MR16 ConstantColor with a beam angle of 25°, would produce 700 lux at 2 metres height with a beam diameter of 0.9 metres.

If, however, you wanted a smaller beam diameter of say 0.4 metres, the 20W spot beam ESX with its narrower 13° beam angle would be more effective, producing 838 lux. This would provide 15% extra luminance with a 60% reduction in energy consumption.

Selecting beam angles

GE halogen lamps are offered in a range of beam angles from 7° to 60°. Choose small beam angles to highlight single features with a tight focus or wide beam angles to provide a wash of ambient lighting, with a variety of effects achievable with intermediate beams.

Figure 1

Choosing the right power and beam

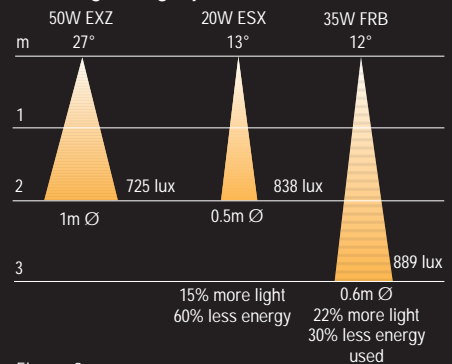
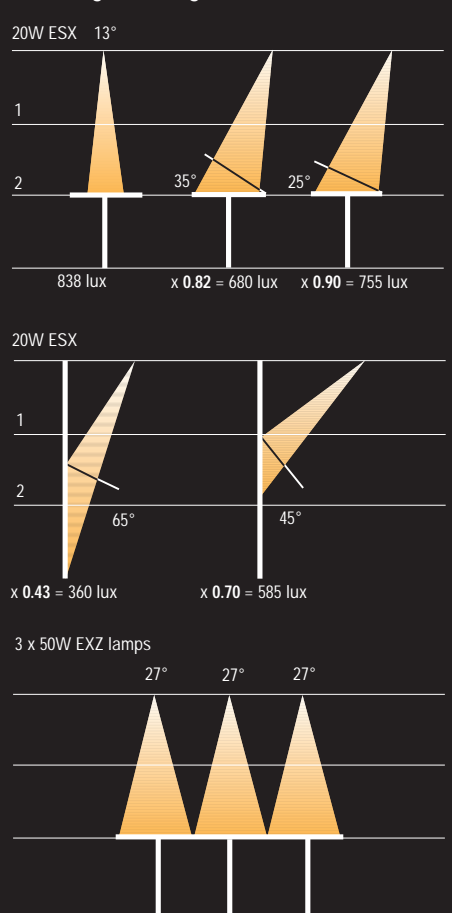


Figure 2

Choosing beam angles



Uniform performance

The performance cones can also provide a quick guide for achieving uniformity of illuminance on a horizontal plane

Select UV control

Tungsten Halogen lamps emit ultra violet rays similar to sunlight. Although the level of ultra violet emitted by halogen lamps is far lower - for example 8 hours in an office lit by halogen is equivalent to 10 minutes' sun - eliminating these emissions is a sensible precaution. Choosing UV control halogen lamps effectively eliminates UV-C and greatly reduces UV-B radiation.

How to achieve maximum lamp performance

Most instances of early failure of halogen lamps are caused by incorrect installation. The risk of early failure will be reduced if you observe the following points:

- **Damage** such as bent pins and cracks in the ceramic base caused by rough handling during installation.
- **Poor electrical contact** between pins and lampholder which can lead to arcing. This is usually a result of insufficient insertion of the pins into the lamp holder.
- **Finger grease** on the quartz bulb which creates local hot spots and can lead to disintegration of the glass. Note this problem is avoided with sealed mirror lamps as the bulb is protected from handling.
- **Over voltage** - running a lamp at higher than rated voltage for prolonged periods can substantially reduce life. For example, a 5% increase in rated lamp voltage can lead to a 50% reduction in lamp life. If problems occur the voltage should be checked at the lamp base and the rating of the transformer should be checked against the lamp load applied.
- **Overheating** is usually caused by insufficient ventilation or cooling of the lamp and can be the result of poorly designed lamp fittings or installation.
- **Open lamps** should only be used within a luminaire with a protective shield.

Atmospheric factors

In harsh atmospheric conditions we would recommend ConstantColor which has a much more resilient coating plus the added advantage of 6000 hours.

Humidity does not normally present a problem with dichroic lamps, however early lamp failure can occur in areas of high humidity such as in kitchens, bathrooms and swimming pools.

In these applications, fittings should be chosen with a moisture resistance or IP rating, appropriate to the environmental conditions in which they will be used.



Narrow-focus halogen light used to create striking display highlights at a fashion outlet on Avenue De Montaigne, Paris, France.

Fluorescent lamps

GE offers you the benefits of nearly 60 years' experience in the design and manufacture of fluorescent lamps. Our comprehensive range of lamps continues to set new standards in light output, quality and efficiency and is available in a wide choice of lengths, wattages and colours.

Choose GE fluorescents for extra long lamp life, excellent lumen maintenance, improved colour performance and higher light output.

Low operating costs, energy efficiency and long life make fluorescent tubes the preferred lighting option for many office and commercial interiors



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Fluorescent lamps range overview

Lumen Value Table

	Lamp watts length mm	T5 16 mm Ø				T8 26 mm Ø					
		4	6	8	13	15	18	30	36-1M	36	38
Triphosphor Polylux XL	827 Polylux XL					1000	1350	2450		3350	
	830 Polylux XL					1000	1350	2450	3100	3350	3300
	835 Polylux XL						1350			3350	
	840 Polylux XL					1000	1350	2450	3100	3350	3300
	860 Polylux XL						1300			3250	
Triphosphor Polylux	827 Polylux					1000					
	830 Polylux					1000					
	835 Polylux										
	840 Polylux			460		1000					
5 Band Phosphor	930 Polylux Deluxe						1000			2350	
	940 Polylux Deluxe						1000			2350	
Standard Halophosphate	Warm White	150	300	400	850	850	1150	2300		2850	
	White	150	300	400	850	850	1150	2300		2850	3050
	Natural/Universal White						1100		2400	2600	
	Cool White	150	290	380	800	850	1150	2250	2650	2850	
	Daylight					750	950	1800	2200	2350	

Product Colour Performance Characteristics

	Type	CIE Group	Ra Index Description	Ra Index	Chromaticity Co-ordinates X Y		CCT °K	GE ref.	Ave Lm/W
Triphosphor Polylux XL	827 Polylux XL	1B	Good	85	0.463	0.420	2700	827	93
	830 Polylux XL	1B	Good	85	0.440	0.402	2950	830	93
	835 Polylux XL	1B	Good	85	0.415	0.402	3400	835	93
	840 Polylux XL	1B	Good	85	0.380	0.377	4000	840	93
	860 Polylux XL	1B	Good	85	0.316	0.336	6300	860	90
Triphosphor Polylux	827 Polylux	1B	Good	80+	0.463	0.420	2700	827	84
	830 Polylux	1B	Good	80+	0.440	0.402	2950	830	84
	835 Polylux	1B	Good	80+	0.415	0.402	3400	835	84
	840 Polylux	1B	Good	80+	0.380	0.377	4000	840	84
5 Band Phosphor	930 Polylux Deluxe	1A	Excellent	95	0.435	0.401	3000	930	65
	940 Polylux Deluxe	1A	Excellent	95	0.387	0.371	4000	940	65
Standard Halophosphate	Warm White	3	Poor	51	0.440	0.403	2950	29	79
	White	3	Poor	54	0.409	0.394	3450	35	79
	Natural/Universal White	2	Moderate	73	0.377	0.374	4050	25	72
	Cool White	3	Poor	58	0.380	0.380	4000	33	79
	Daylight	2	Moderate	76	0.313	0.337	6500	54	65
Special Colours	Deluxe Natural	1A	Excellent	92	0.393	0.356	3500	36	46
	Kolor-rite	1B	Good	89	0.380	0.377	4000	38	50
	Artificial Daylight	1A	Excellent	92	0.313	0.329	6500	AD	44
	Northlight	1A	Excellent	93	0.317	0.324	6300	55	50
	UV non-filter	-	NA	-	0.222	0.244	-	05	-
	Blacklight Blue	-	NA	-	-	-	-	BLB	-

Ave Lm/W = average initial lumens per watt (based on 36W, 1.2M tube or 40W, 1.2M tube for special colours and Polylux)

Ra = colour rendering index (higher Ra's give better colour rendering, max. = 100) NA = not applicable

Special Colours are available in some sizes, please ask our sales department for more information.

		T12 38mm Ø							Mod-U-Line™		Circline™			
58	70	20	40	65	75	85	100	125	20	40	22	32	40	60
1500	1800	600	1200	1500	1800	2400	2400	2400	265	525	209.5	311.2	412.6	412.6
5200														
5200	6300													
5200	6300													
5200	6300													
5000														
		1450	3350	5300	6550	7900	9100	10550						
									3250					
		1450	3350	5300	6550	7900	9100							
3750														
3750														
4600	5550	1150	2950	4750	5750				2875		1050	1875	2800	3700
4600	5550	1150	2950	4750	5750	7100	8300	9200	2875					
4100		1050	2500	4000	4650									
4600	5450	1150	2950	4750	5700		8100	9100	2875		1000	1825	2700	
3750		950	2450	3900							875	1550	2500	

Description

Very warm, similar to incandescent light. Gives a warm effect in restaurants, hotels etc.

Warm, gives a homely welcoming effect. Used in restaurants, hotels, offices and supermarkets.

Intermediate colour, used in general, commercial and industrial lighting.

Creates cool atmosphere in commercial installations. Recommended for hospitals.

Very cool. Popular in warmer climates.

Very warm, similar to incandescent light. Gives a warm effect in restaurants, hotels etc.

Warm, gives a homely welcoming effect. Used in restaurants, hotels, offices and supermarkets.

Intermediate colour, used in general, commercial and industrial lighting.

Creates cool atmosphere in commercial installations. Recommended for hospitals.

Creates warm effect while giving excellent colour rendering for colour matching and reproduction work.

Creates cool effect while giving excellent colour rendering for colour matching and reproduction work.

Warm, used in commercial or public buildings to create a "warm" atmosphere.

Intermediate colour, standard colour for almost all applications.

Cool, used in offices and shops. Higher colour rendering, but less efficient than cool white.

Cool, used to create a cooler atmosphere in offices, factories and shops.

Very cool. Popular in warmer climates.

Intermediate colour, used for food displays in shops and supermarkets. Also used in florists.

Cool, used for sunlight effect in medical applications.

Wide spectrum output (including UV). Used for colour work in shops, printing, labs etc.

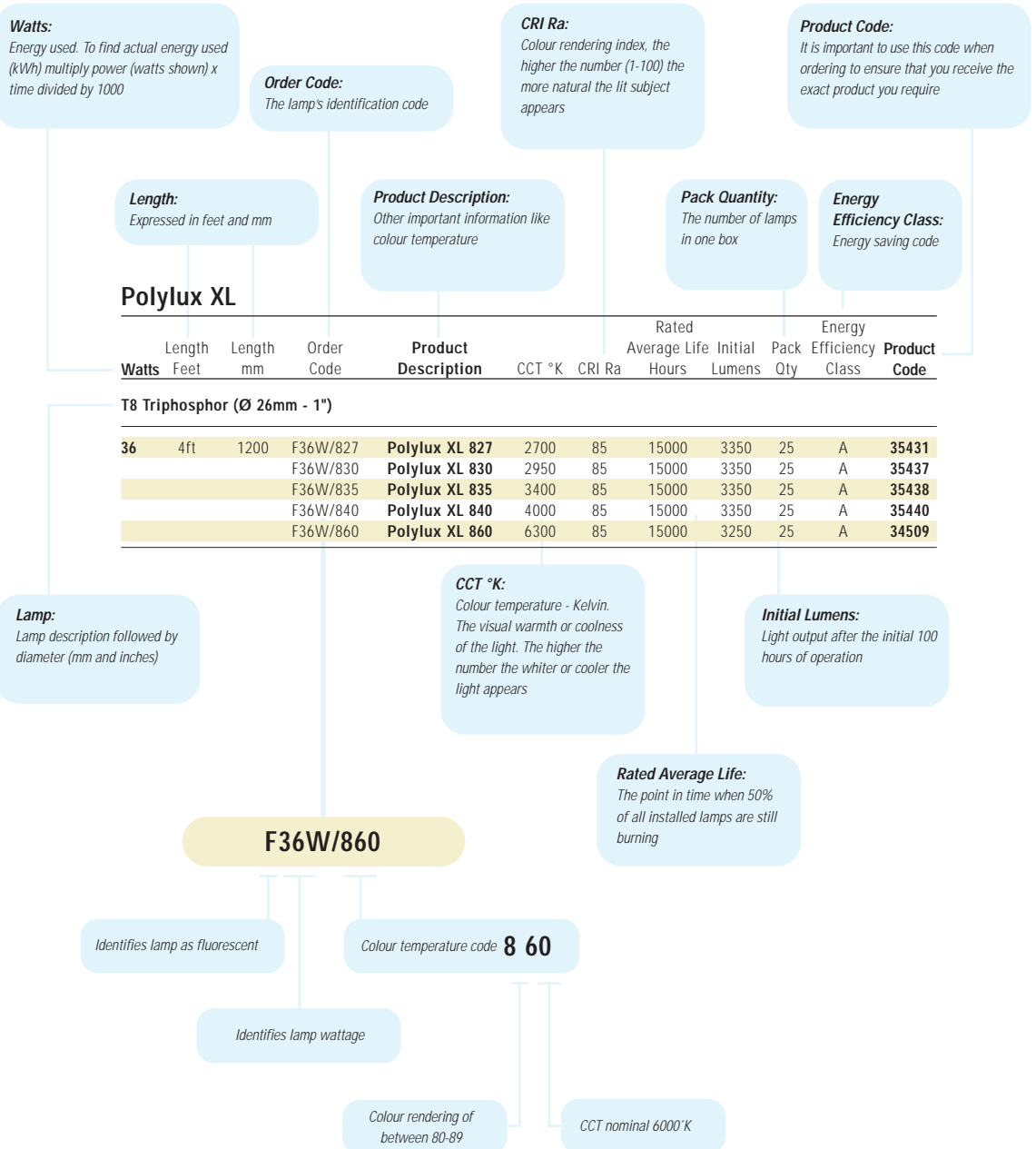
Cool wintry effect, similar to artificial daylight. Used in jewellers, furriers and colour work.

Small amount of visible light with long wave UV-A radiation emitted to attract insects into insect traps.

Only long wave UV produced. Used decoratively in disco's as the UV makes white fabrics fluoresce.

Product identification

The following glossary of terms and descriptions can help you when checking fluorescent lamp specifications and explains how to use the order codes when ordering products. Within each product line, lamps are divided into families - within families, lamps are listed by wattage.

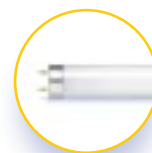
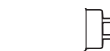


Fluorescent

Polylux XL

Watts	Length Feet	Length mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
T8 Triphosphor (Ø 26mm - 1")											
18	2ft	600	F18W/827	Polylux XL 827	2700	85	15000	1350	25	A	35426
			F18W/830	Polylux XL 830	2950	85	15000	1350	25	A	35427
			F18W/835	Polylux XL 835	3400	85	15000	1350	25	A	35428
			F18W/840	Polylux XL 840	4000	85	15000	1350	25	A	35429
			F18W/860	Polylux XL 860	6300	85	15000	1300	25	A	34492
36	4ft	1200	F36W/827	Polylux XL 827	2700	85	15000	3350	25	A	35431
			F36W/830	Polylux XL 830	2950	85	15000	3350	25	A	35437
			F36W/835	Polylux XL 835	3400	85	15000	3350	25	A	35438
			F36W/840	Polylux XL 840	4000	85	15000	3350	25	A	35440
			F36W/860	Polylux XL 860	6300	85	15000	3250	25	A	34509
58	5ft	1500	F58W/827	Polylux XL 827	2700	85	15000	5200	25	A	35442
			F58W/830	Polylux XL 830	2950	85	15000	5200	25	A	35443
			F58W/835	Polylux XL 835	3400	85	15000	5200	25	A	35444
			F58W/840	Polylux XL 840	4000	85	15000	5200	25	A	35445
			F58W/860	Polylux XL 860	6300	85	15000	5000	25	A	34502
30	3ft	900	F30W/827	Polylux XL 827	2700	85	15000	2450	25	A	35575
			F30W/830	Polylux XL 830	2950	85	15000	2450	25	A	35576
			F30W/840	Polylux XL 840	4000	85	15000	2450	25	A	35577
36		970	F36WM/830	Polylux XL 830	2950	85	15000	3100	25	A	36341
			F36WM/840	Polylux XL 840	4000	85	15000	3100	25	A	36343
38	42in	1050	F38W/830	Polylux XL 830	2950	85	15000	3300	25	A	33307
			F38W/840	Polylux XL 840	4000	85	15000	3300	25	A	33308
70	6ft	1800	F70W/830	Polylux XL 830	2950	85	15000	6300	25	A	35578
			F70W/835	Polylux XL 835	3400	85	15000	6300	25	A	35579
			F70W/840	Polylux XL 840	4000	85	15000	6300	25	A	35580

Polylux XL rated average life hours on HF Electronic Gear is 18,000 Hours



Polylux

Watts	Length Feet	Length mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
T8 Triphosphor (Ø 26mm - 1")											
15	18in	450	F15W/827	Polylux 827	2700	80+	12000	1000	25	B	29591
			F15W/830	Polylux 830	2950	80+	12000	1000	25	B	29600
			F15W/840	Polylux 840	4000	80+	12000	1000	25	B	29603



Polylux Deluxe

Watts	Length Feet	Length mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
T8 Five Band Phosphor (Ø 26mm - 1")											
18	2ft	600	F18W/930	Polylux Deluxe 930	3000	95	12000	1000	25	B	29613
			F18W/940	Polylux Deluxe 940	3800	95	12000	1000	25	B	29614
36	4ft	1200	F36W/930	Polylux Deluxe 930	3000	95	12000	2350	25	B	29648
			F36W/940	Polylux Deluxe 940	3800	95	12000	2350	25	B	29649
58	5ft	1500	F58W/930	Polylux Deluxe 930	3000	95	12000	3750	25	B	29660
			F58W/940	Polylux Deluxe 940	3800	95	12000	3750	25	B	29661



Fluorescent

Polylux XL Sleeveless Range - Eco Pack

Watts	Length	Length	Order Code	Product Description	CCT °K	CRI Ra	Rated	Initial	Pack	Energy	Product
	Feet	mm					Average Life				
T8 (Ø 26mm - 1")											
18	2ft	600	F18W/830 ECO	Polylux XL 830	2950	85	15000	1350	25	A	34841
36	4ft	1200	F36W/830 ECO	Polylux XL 830	2950	85	15000	3350	25	A	47981
58	5ft	1500	F58W/830 ECO	Polylux XL 830	2950	85	15000	5200	25	A	47980
18	2ft	600	F18W/840 ECO	Polylux XL 840	4000	85	15000	1350	25	A	34845
36	4ft	1200	F36W/840 ECO	Polylux XL 840	4000	85	15000	3350	25	A	34365
58	5ft	1500	F58W/840 ECO	Polylux XL 840	4000	85	15000	5200	25	A	47979

Polylux XL rated average life hours on HF Electronic Gear is 18,000 Hours

Standard Halophosphate

Watts	Length	Length	Order Code	Product Description	CCT °K	CRI Ra	Rated	Initial	Pack	Energy	Product
	Feet	mm					Average Life				
T8 Halophosphate (Ø 26mm - 1")											
18	2ft	600	F18W/29	Warm White	2950	51	9000	1150	25	B	29546
			F18W/35	White	3450	54	9000	1150	25	B	29547
			F18W/33	Cool White	4000	58	9000	1150	25	B	35098
			F18W/54	Daylight	6500	76	9000	950	25	B	34883
			F18W/25	Natural	4050	73	9000	1100	25	B	29548
36	4ft	1200	F36W/29	Warm White	2950	51	9000	2850	25	B	29565
			F36W/35	White	3450	54	9000	2850	25	B	37734
			F36W/33	Cool White	4000	58	9000	2850	25	B	37488
			F36W/54	Daylight	6500	76	9000	2350	25	B	37492
			F36W/25	Natural	4050	73	9000	2600	25	B	29568
58	5ft	1500	F58W/29	Warm White	2950	51	9000	4600	25	B	29571
			F58W/35	White	3450	54	9000	4600	25	B	29575
			F58W/33	Cool White	4000	58	9000	4600	25	B	29570
			F58W/54	Daylight	6500	76	9000	3750	25	B	29580
			F58W/25	Natural	4050	73	9000	4100	25	B	29577
15	18in	450	F15W/29	Warm White	2950	51	9000	850	25	B	29527
			F15W/35	White	3450	54	9000	850	25	B	29531
			F15W/33	Cool White	4000	58	9000	850	25	B	29524
			F15W/54	Daylight	6500	76	9000	750	25	B	29534
30	3ft	900	F30W/29	Warm White	2950	51	9000	2300	25	B	29557
			F30W/35	White	3450	54	9000	2300	25	B	29561
			F30W/33	Cool White	4000	58	9000	2250	25	B	29556
			F30W/54	Daylight	6500	76	9000	1800	25	B	29563
36	970	F36WM/33	Cool White	4000	58	9000	2600	25	B	36422	
		F36WM/54	Daylight	6500	76	9000	1900	25	B	36421	
		F36WM/25	Natural	4050	73	9000	2400	25	B	36420	
38	42in	1050	F38W/35	White	3450	54	9000	3050	25	B	29682
70	6ft	1800	F70W/29	Warm White	2950	51	9000	5550	25	B	29587
			F70W/35	White	3450	54	9000	5550	25	B	29589
			F70W/33	Cool White	4000	58	9000	5450	25	B	29586

*For cost-efficiency,
energy-saving and
a better quality of
light - switch on to
Polylux XL*



Polylux XL

- *Polylux XL provides more light for longer with a choice of conventional or electronic gear.*
- *Rated life of 15,000 hours (conventional gear) and 18,000 hours (electronic).*
- *95% light output is maintained throughout the lamp's life.*
- *Enhanced colour rendering ability plus a range of colour options.*

Polylux XL provides warm natural colour for a more comfortable office environment.

Applications:

retail, office areas, commercial, industrial and sports halls.

Polylux XL beats standard halophosphate lamps for light output, energy-efficiency and length of life.

- You need just 48 Polylux XL lamps to maintain the same light level at a given time as 64 halophosphate lamps.
- Polylux XL provides more light than standard lamps, better energy utilisation and lasts longer.

GE Polylux XL

Polylux XL - GE's triphosphor fluorescent tubes offers

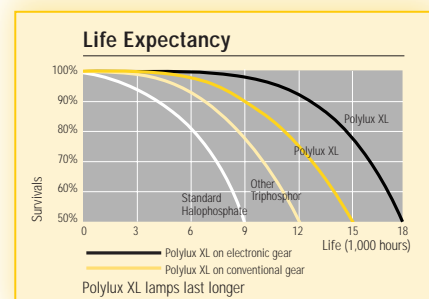
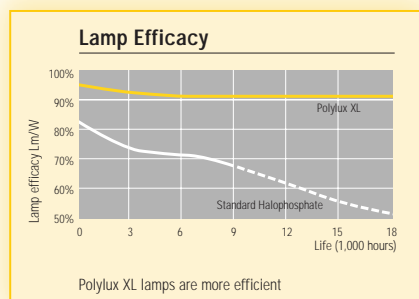
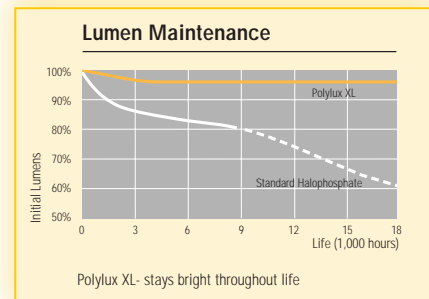
- A better quality light
- A brighter light
- A consistently high light level
- A longer life performance
- A more productive and efficient lighting solution

Long Life -	High Quality Light -
<ul style="list-style-type: none"> • Extended relamping cycles • Fewer costly spot replacements • Reduced disruption and production downtime • Reduced relamping in difficult to access areas 	<ul style="list-style-type: none"> • Well lit surroundings • Consistently maintained light levels • Excellent colour rendering • Enhanced performance between maintenance schedules

Lower cost of light

Upgrading to Polylux XL lamps on electronic ballast means twice the life of a standard halophosphate tube and up to 12.5% longer life than other triphosphor lamps on the market.

Polylux XL lamps can result in extended relamping cycles, which significantly reduce maintenance costs.



GE Polylux XL lamps will change the way you think about fluorescent lighting. With its advanced triphosphor coating, Polylux XL offers outstanding colour reproduction, making people look more natural and colours more vibrant and true. Compared to standard halophosphate lamps, Polylux XL provides more light for longer, ensuring brighter, more consistent light in a wide range of applications.

835 White (3,400°K)



827 Extra Warm White (2,700°K)



840 Cool White (4,000°K)



830 Warm White (2,950°K)



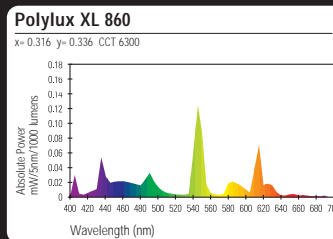
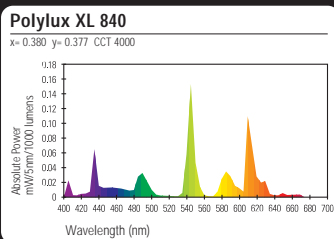
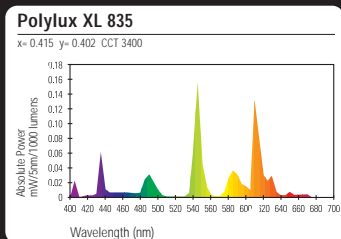
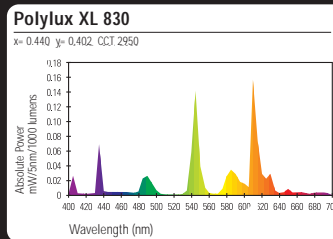
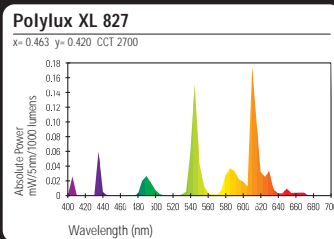
860 Daylight (6,300°K)



Polylux XL

Spectral Distribution

Spectral Power distribution curves provide the user with a visual profile of the colour characteristics of a light source. Fluorescent lamps combine a continuous spectra from their phosphor with the line spectra of mercury discharge.



Fluorescent

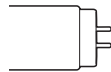
T12 Polylux

Watts	Length Feet	Length mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
T12 Triphosphor (Ø 38mm - 1 1/2")											
20	2ft	600	F20W/830	Polylux 830	2950	80+	12000	1450	25	B	32659
			F20W/840	Polylux 840	4000	80+	12000	1450	25	B	29820
40	4ft	1200	F40W/830	Polylux 830	2950	80+	12000	3350	25	A	32647
			F40W/840	Polylux 840	4000	80+	12000	3350	25	A	29821
65	5ft	1500	F65W/830	Polylux 830	2950	80+	12000	5300	25	B	32655
			F65W/840	Polylux 840	4000	80+	12000	5300	25	B	29822
75	6ft	1800	F75W/830	Polylux 830	2950	80+	12000	6550	25	-	32656
			F75W/840	Polylux 840	4000	80+	12000	6550	25	-	29823
85	8ft	2400	F85W/830	Polylux 830	2950	80+	12000	7900	25	-	32696
			F85W/840	Polulux 840	4000	80+	12000	7900	25	-	30642
100	8ft	2400	F100W/830	Polylux 830	2950	80+	12000	9100	25	-	31265
			F100W/840	Polylux 840	4000	80+	12000	9100	25	-	31266
125	8ft	2400	F125W/830	Polylux 830	3000	80+	12000	10550	25	-	32658



T12 Standard Halophosphate

Watts	Length Feet	Length mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
T12 Halophosphate (Ø 38mm - 1 1/2")											
20	2ft	600	F20W/29	Warm White	2950	51	9000	1150	25	B	29747
			F20W/35	White	3450	54	9000	1150	25	B	29748
			F20W/33	Cool White	4000	58	9000	1150	25	B	29746
			F20W/54	Daylight	6500	76	9000	950	25	B	29750
			F20W/25	Natural	4050	73	9000	1050	25	B	29749
40	4ft	1200	F40W/29	Warm White	2950	51	9000	2950	25	B	29767
			F40W/35	White	3450	54	9000	2950	25	B	29769
			F40W/33	Cool White	4000	58	9000	2950	25	B	29765
			F40W/54	Daylight	6500	76	9000	2450	25	B	29771
			F40W/25	Natural	4050	73	9000	2500	25	B	29770
65	5ft	1500	F65W/29	Warm White	2950	51	9000	4750	25	B	29780
			F65W/35	White	3450	54	9000	4750	25	B	29781
			F65W/33	Cool White	4000	58	9000	4750	25	B	29779
			F65W/54	Daylight	6500	76	9000	3900	25	B	29784
			F65W/25	Natural	4050	73	9000	4000	25	B	29783
75	6ft	1800	F75W/29	Warm White	2950	51	9000	5750	25	B	29794
			F75W/35	White	3450	54	9000	5750	25	B	29795
			F75W/33	Cool White	4000	58	9000	5700	25	B	29792
85	8ft	2400	F85W/35	White	3450	54	9000	7100	25	-	31244
100	8ft	2400	F100W/35	White	3450	54	9000	8300	25	-	31246
			F100W/33	Cool White	4000	58	9000	8100	25	-	31260
125	8ft	2400	F125W/35	White	3450	54	9000	9200	25	-	31247
			F125W/33	Cool White	4000	58	9000	9100	25	-	31248



Fluorescent

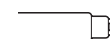
T12 Special colour

Watts	Length Feet	Length mm	Order Code	Product Description	Rated Average Life Hours	Pack Qty	Energy Efficiency Class	Product Code
T12 Blacklight Blue (Ø 38mm - 1 1/2")								
20	2ft	600	F20W/BLB	Blacklight Blue	9000	6	-	34747
40	4ft	1200	F40W/BLB	Blacklight Blue	20000	6	-	10531



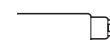
T5 Polylux - Bulk Pack

Watts	Length Feet	Length mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
T5 Triphosphor (Ø 16mm - 5/8")											
8	1ft	300	F8W/827BP	Polylux 827	2700	80+	5000	460	50	B	35096
			F8W/840BP	Polylux 840	2950	80+	5000	460	50	B	35108



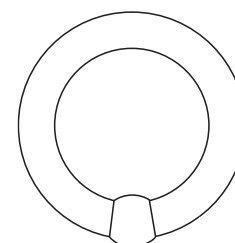
T5 Standard Halophosphate

Watts	Length Feet	Length mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
T5 Halophosphate (Ø 16mm - 5/8")											
4	6in	150	F4W/33	Cool White	4000	58	5000	150	25	B	29505
			F4W/35	White	3450	54	5000	150	25	B	29507
6	9in	225	F6W/33	Cool White	4000	58	5000	290	25	B	29508
			F6W/35	White	3450	54	5000	300	25	B	29510
8	1ft	300	F8W/29	Warm White	2950	51	5000	385	25	B	37000
			F8W/33	Cool White	4000	58	5000	380	25	B	37005
			F8W/33BP	Cool White	4000	58	5000	380	50	B	32489
			F8W/35	White	3450	54	5000	400	25	B	37007
			F8W/35BP	White	3450	54	5000	400	50	B	32486
13	21in	525	F13W/29	Warm White	2950	51	5000	850	25	B	35739
			F13W/33	Cool White	4000	58	5000	800	25	B	35737
			F13W/35	White	3450	54	5000	850	25	B	35740

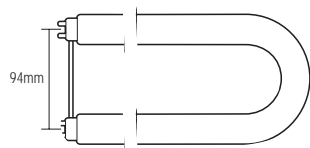


Circline™

Watts	Diam mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
22	209.5	FC8T9/WW	Warm White	3000	51	12000	1050	12	B	11023
		FC8T9/CW	Cool White	4150	58	12000	1000	12	B	33774
		FC8T9/D	Daylight	6250	75	12000	875	12	B	11026
32	311.2	FC12T9/WW	Warm White	3000	51	12000	1875	12	B	11034
		FC12T9/CW	Cool White	4150	62	12000	1825	12	B	33890
		FC12T9/D	Daylight	6250	75	12000	1550	12	B	11039
40	412.6	FC16T9/WW	Warm White	3000	51	12000	2800	12	B	35275
		FC16T9/CW	Cool White	4150	62	12000	2700	12	B	35276
		FC16T9/D	Daylight	6250	75	12000	2500	12	B	35278
60	412.6	FC1660/WW	Warm White	3000	51	12000	3700	12	B	29886



Fluorescent



Mod-U-Line™

Watts	Length Feet	Length mm	Order Code	Product Description	CCT °K	CRI Ra	Rated Average Life Hours	Initial Lumens	Pack Qty	Energy Efficiency Class	Product Code
20		265	F20UT8/05	Ultra Violet			2000		20	-	30681
40	21in	525	F40UT8/835	Polylux 835	3400	80+	12000	3250	20	A	29904
			F40UT8/29	Warm White	3000	57	12000	2875	20	B	29888
			F40UT8/33	Cool White	4200	58	12000	2875	20	B	29892
			F40UT8/35	White	3450	54	12000	2875	20	B	29891

CAUTION : Spacing bracket is not a handle. Bracket may separate from lamp.

Starters



Order Code	Product Description	Pack Configuration	Pack Qty	Product Code
155/200	15/22W 110V single or 220/240V twin	1	250	35292
155/200			1000	32683
155/500	4/65W universal 220/240V	1	250	36536
155/500			2000	36537
155/800	75/125W 240V	2	250	30920
155/801	70/100W 240V	2	250	30921
155/801			1500	29923

1 = 10 x 25 Way Pack
2 = 25 x 10 Way Pack

Brand cross-reference

GE	Description	Osram	Philips	Sylvania
Polylux XL		Lumilux Plus	TLD Super 80 New Generation	Luxline Plus
	827	41	827	827
	830	31	830	830
	835	-	-	-
	840	21	840	840
	860	11	865	860
Standard	25 Natural/Universal White	25	25	125
	29 Warm White	30	29	129
	35 White	23	35	135
	33 Cool White	20	33	133
	54 Daylight	10	54	154
Polylux De Luxe		Lumilux De Lux	Super 90	Luxline
	930	32	930	193
	940	22	940	194
Circline™		Circular Fluorescent	TLE	Circular Fluorescent
Mod-U-Line™		U-Shaped Fluorescent	TL-U	U-Shaped Fluorescent

This cross-reference does not necessarily represent the full listing of lamps offered in alternative brands.

Fluorescent lamps

Fluorescent lamps provide a much more dispersed light than 'point' sources such as incandescent, halogen or discharge lamps. This quality, along with their outstanding energy efficiency, make them ideally suited for lighting large open areas such as offices and industrial buildings.

Standard fluorescent lamps use halophosphate lamp coatings. These lamps are used where low initial cost is the most important factor. However, higher performance lamps using triphosphor coatings, such as GE's Polylux XL lamps, are now increasingly being used as they provide better colour rendering and significant energy savings.

The effects of switching

Frequent switching of fluorescent lamps can reduce their operational life. The graph, Fig 1 below, shows the effect on a lamp's life of different switching cycles.

Although a lamp that is only switched on and off rarely will last longer, light output does fall in the latter stage of a lamp's life.

The effects of temperature change

Fluorescent lamps are designed to produce their optimum light output at an ambient temperature of 25°C. However, when installed in a lamp

fitting, the temperature of the air surrounding a lamp can change and affect the light output of the lamp. The effects of changes in ambient temperature for a typical lamp are shown in the graph, Fig 2 below.

Using electronic ballasts

The efficiency of fluorescent lamps can be improved by increasing the frequency of the mains voltage supplied to them. Electronic ballasts and controls can be used to increase the normal mains frequency of 50/60Hz to 25/30KHz improving lamp efficiency by approximately 10%. Electronic ballasts also consume less power than conventional ballasts and when combined with other efficiency benefits, electronic ballasts can achieve power savings of around 20% compared to conventional 50/60Hz systems with the same light output levels.

Light-output data

The lumen output figures quoted are measured at 25°C in accordance with EN60081 and EN60901.

Caution notice

Handle and install all fluorescent lamps with care. Turn off power before installing lamps.

Fig 1 Effect on life of different switching cycles

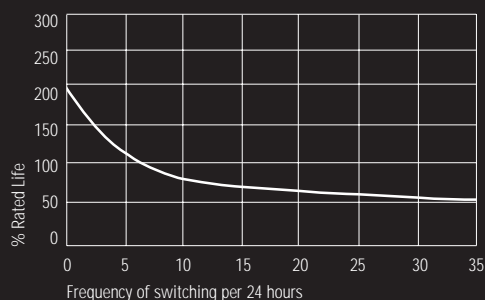
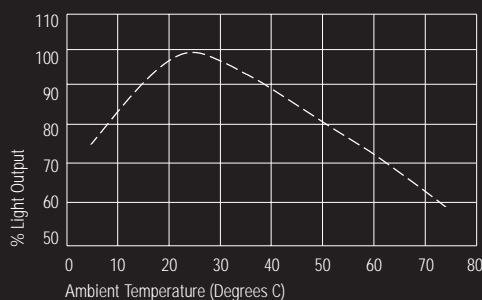


Fig 2 Light output relative to ambient temperature



Compact Fluorescent lamps

GE's compact fluorescent lamps give you more light and less heat, converting up to 25% of the electricity they use into light (incandescent lamps convert just 5% into light and the remaining 95% into heat). Because they use less energy you pay less for your lighting. They also last up to ten times as long as incandescent lamps, so you spend less on maintenance.

Whilst you save on cost with GE compact fluorescents, you lose nothing in quality. Colours are reproduced accurately and flicker-free light output is maintained for the whole of the lamp's life.





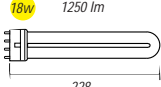
































Energy-saving compact fluorescents cut the cost of providing constant light in public access areas






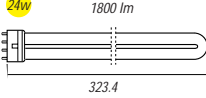


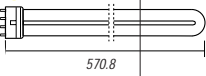
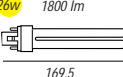
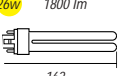
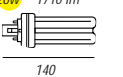

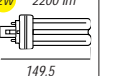
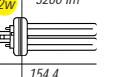
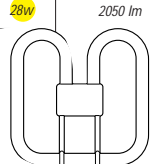
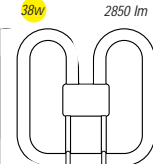
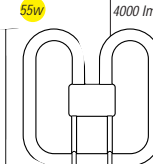
Compact Fluorescent

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GE Biax® Lamps


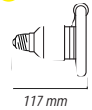


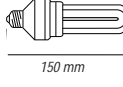
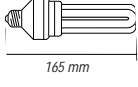
Nearest equivalent wattage	WATTS	LUMENS	
		500	1000
<p>Biax L - 4 pin</p>  <p>18W 24W 34W 36W 40W 55W</p>	 43.9 mm		 1250 lm 228
<p>Biax S - 2 pin</p>  <p>5W 7W 9W 11W</p>	 32.5 mm	<p>7W 400 lm</p>  136.8	<p>11W 900 lm</p>  237.3
<p>Biax S/E - 4 pin</p>  <p>5W 7W 9W 11W</p>	 37.5 mm	<p>7W 400 lm</p>  122.3	<p>11W 900 lm</p>  222.8
<p>Biax D - 2 pin</p>  <p>10W 13W 18W 26W</p>	 35 mm	<p>10W 600 lm</p>  108.5	<p>13W 900 lm</p>  133
<p>Biax D/E - 4 pin</p>  <p>10W 13W 18W 26W</p>	 35 mm	<p>10W 600 lm</p>  101	<p>13W 900 lm</p>  125.5
<p>Biax T - 2 pin</p>  <p>13W 18W 26W</p>	 49 mm		<p>13W 890 lm</p>  115.5
<p>Biax T/E - 4 pin</p>  <p>13W 18W 26W 32W</p>	 49 mm		<p>13W 890 lm</p>  108
<p>Biax O/E - 4 pin</p>  <p>42W</p>	 58 mm		
<p>Biax 2D - 2 pin</p>  <p>16W 28W</p>	 202 mm  140 mm  92 mm		
<p>Biax 2D/E - 4 pin</p>  <p>10W 16W 21W 28W 38W</p>		<p>10W 650 lm</p>  92	<p>16W 1050 lm</p>  140
			<p>21W 1350 lm</p>  140

Compact Fluorescent selector

1500	2000	2500	3000	4000	5000
					
 <p>24w 1800 lm 323.4</p>		 <p>36w 2900 lm 418.4</p>	 <p>40w 3500 lm 570.8</p>		 <p>55w 4850 lm 570.8</p>
 <p>26w 1800 lm 169.5</p>					
 <p>26w 1800 lm 162</p>					
 <p>26w 1710 lm 140</p>					
 <p>26w 1710 lm 132.5</p>		 <p>32w 2200 lm 149.5</p>			
			 <p>42w 3200 lm 154.4</p>		
	 <p>28w 2050 lm 202</p>		 <p>38w 2850 lm 202</p>	 <p>55w 4000 lm 202</p>	

GE Electronic Biax® Lamps

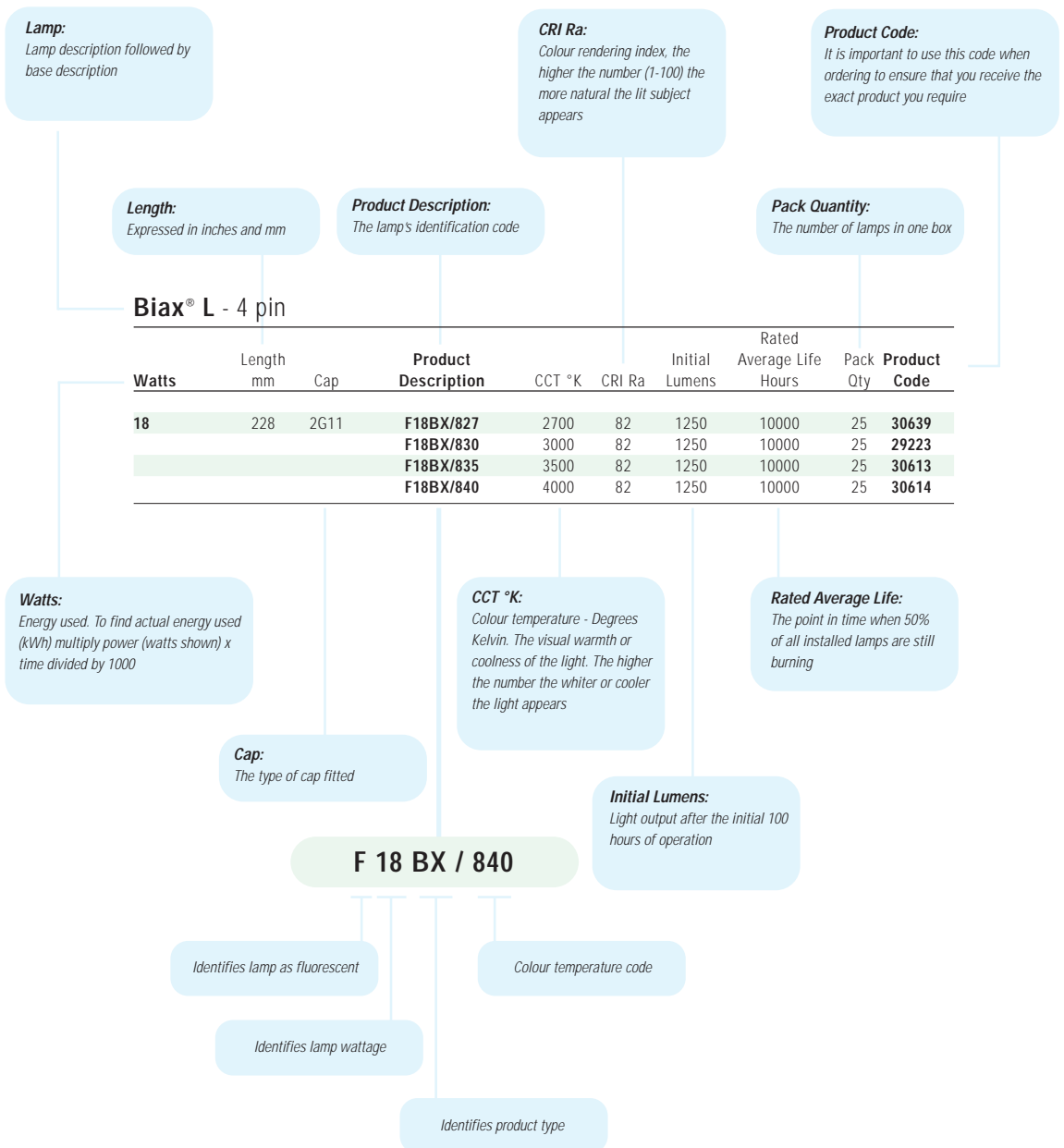
		LUMENS		500		1000		1500	
Nearest equivalent wattage		WATTS		25	40	60	75	100	
Electronic Biax - M			9W 11W		9w 480 lm 139.5	11w 600 lm 144			
Electronic Biax - D					9w 400 lm 138	11w 600 lm 142.5			
Electronic Biax - T			15W 20W 23W			15w 900 lm 135.5	20w 1200 lm 150	23w 1500 lm 173.5	
Electronic Biax - Q					23W				23w 1500 lm 159
Electronic Biax Globe			11W 15W 20W 23W		11w 450 lm 152 80mm Ø	15w 750 lm 152 92mm Ø	20w 1050 lm 180 118 mm Ø	23w 1250 lm 193 120 mm Ø	
Genura R80					23W			23w 1100 lm 131 82 mm Ø	
Electronic Biax GLS			9W 14W 15W 20W		9w 390lm 139 68mm Ø	14w 540lm 139 68mm Ø	15w 750lm 144 68mm Ø	20w 1050lm 158 68mm Ø	
Electronic Biax Candle					5W	5w 170lm 132 42mm Ø			

Nearest equivalent wattage	LUMENS				
	WATTS	25	40	500	1000
 <p>2D and Adaptor</p> <p>13W</p>				 <p>13W 650 lm</p> <p>117 mm</p>	
 <p>Electronic Lamp and Adaptor</p> <p>15W 20W</p>	 <p>58 mm</p>		 <p>15W 900 lm</p> <p>150 mm</p>	 <p>20W 1200 lm</p> <p>165 mm</p>	

Compact Fluorescent selector

Product identification

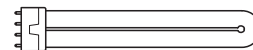
The following glossary of terms and descriptions can help you when checking compact fluorescent lamp specifications and explains how to use the order codes when ordering products. Within each product line, lamps are divided into families - within families, lamps are listed by wattage.



Compact Fluorescent

Biax® L - 4 pin

Watts	Length mm	Cap	Product Description	CCT °K	CRI Ra	Rated		Pack Qty	Product Code
						Initial Lumens	Average Life Hours		
18	228	2G11	F18BX/827	2700	82	1250	10000	25	30639
			F18BX/830	3000	82	1250	10000	25	29223
			F18BX/835	3500	82	1250	10000	25	30613
			F18BX/840	4000	82	1250	10000	25	30614
24	323.4	2G11	F24BX/827	2700	82	1800	10000	25	30640
			F24BX/830	3000	82	1800	10000	25	30615
			F24BX/835	3500	82	1800	10000	25	29383
			F24BX/840	4000	82	1800	10000	25	29496
34***	535	2G11	F34BX/830	3000	82	2800	10000	25	30682
			F34BX/835	3500	82	2800	10000	25	30683
			F34BX/840	4000	82	2800	10000	25	30684
36	418.4	2G11	F36BX/827	2700	82	2900	10000	25	30641
			F36BX/830	3000	82	2900	10000	25	29743
			F36BX/835	3500	82	2900	10000	25	29744
			F36BX/840	4000	82	2900	10000	25	29745
40	570.8	2G11	F40BX/830	3000	82	3500*	10000	25	30028
			F40BX/835	3500	82	3500	10000	25	30029
			F40BX/840	4000	82	3500	10000	25	30030
55**	570.8	2G11	F55BX/830	3000	82	4850	10000	25	31951
			F55BX/835	3500	82	4850	10000	25	31952
			F55BX/840	4000	82	4850	10000	25	31953



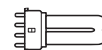
Biax® S - 2 pin

Watts	Length mm	Cap	Product Description	CCT K	CRI Ra	Rated		Pack Qty	Energy Efficiency Class	Product Code
						Initial Lumens	Average Life Hours			
5	107.8	G23	F5BX/827	2700	82	250	10000	10	A	37654
			F5BX/840	4000	82	250	10000	10	A	37661
7	136.8	G23	F7BX/827	2700	82	400	10000	10	A	37846
			F7BX/835	3500	82	400	10000	10	A	37659
			F7BX/840	4000	82	400	10000	10	A	37660
9	167.3	G23	F9BX/827	2700	82	600	10000	10	A	37651
			F9BX/835	3500	82	600	10000	10	A	37652
			F9BX/840	4000	82	600	10000	10	A	37653
11	237.3	G23	F11BX/827	2700	82	900	10000	10	A	37663
			F11BX/835	3500	82	900	10000	10	A	37666
			F11BX/840	4000	82	900	10000	10	A	37664



Biax® S/E - 4 pin

Watts	Length mm	Cap	Product Description	CCT K	CRI Ra	Rated		Pack Qty	Energy Efficiency Class	Product Code
						Initial Lumens	Average Life Hours			
5	93.3	2G7	F5BX/827/4P	2700	82	250	10000	10	A	37714
			F5BX/840/4P	4000	82	250	10000	10	A	37715
7	122.3	2G7	F7BX/827/4P	2700	82	400	10000	10	A	37658
			F7BX/840/4P	4000	82	400	10000	10	A	37716
9	152.8	2G7	F9BX/827/4P	2700	82	600	10000	10	A	37710
			F9BX/840/4P	4000	82	600	10000	10	A	37711
11	222.8	2G7	F11BX/827/4P	2700	82	900	10000	10	A	37717
			F11BX/840/4P	4000	82	900	10000	10	A	37713



* Lumens on HF gear. Lumens on approved conventional circuit 3360.

** Use on HF gear only.

*** Use with conventional ballast and electronic starter switch or fully electronic unit.

Compact Fluorescent

Biax® D - 2 pin



Watts	Length mm	Cap	Product Description	CCT °K	CRI Ra	Rated		Pack Qty	Product Code
						Initial Lumens	Average Life Hours		
10	108.5	G24d-1	F10DBX/827	2700	82	600	10000	10	12872
			F10DBX/830	3000	82	600	10000	10	12874
			F10DBX/835	3500	82	600	10000	10	12875
			F10DBX/840	4000	82	600	10000	10	12876
			F10DBX/865	6500	82	600	10000	10	12997
13	133	G24d-1	F13DBX/827	2700	82	900	10000	10	18557
			F13DBX/830	3000	82	900	10000	10	12956
			F13DBX/835	3500	82	900	10000	10	18559
			F13DBX/840	4000	82	900	10000	10	20532
			F13DBX/865	6500	82	900	10000	10	13015
18	154	G24d-2	F18DBX/827	2700	82	1200	10000	10	12860
			F18DBX/830	3000	82	1200	10000	10	12861
			F18DBX/835	3500	82	1200	10000	10	12863
			F18DBX/840	4000	82	1200	10000	10	12864
			F18DBX/865	6500	82	1200	10000	10	13017
26	169.5	G24d-3	F26DBX/827	2700	82	1800	10000	10	35250
			F26DBX/830	3000	82	1800	10000	10	35237
			F26DBX/835	3500	82	1800	10000	10	35251
			F26DBX/840	4000	82	1800	10000	10	35252
			F26DBX/865	6500	82	1800	10000	10	35305

Biax® D/E - 4 pin



Watts	Length mm	Cap	Product Description	CCT °K	CRI Ra	Rated		Pack Qty	Product Code
						Initial Lumens	Average Life Hours		
10	101	G24q-1	F10DBX/827/4P	2700	82	600	10000	10	30031
			F10DBX/830/4P	3000	82	600	10000	10	12877
			F10DBX/835/4P	3500	82	600	10000	10	30032
			F10DBX/840/4P	4000	82	600	10000	10	30034
13	125.5	G24q-1	F13DBX/827/4P	2700	82	900	10000	10	30035
			F13DBX/830/4P	3000	82	900	10000	10	10580
			F13DBX/835/4P	3500	82	900	10000	10	30037
			F13DBX/840/4P	4000	82	900	10000	10	30038
18	146.5	G24q-2	F18DBX/827/4P	2700	82	1200	10000	10	12865
			F18DBX/830/4P	3000	82	1200	10000	10	12866
			F18DBX/835/4P	3500	82	1200	10000	10	12869
			F18DBX/840/4P	4000	82	1200	10000	10	12870
26	162	G24q-3	F26DBX/827/4P	2700	82	1800	10000	10	35247
			F26DBX/830/4P	3000	82	1800	10000	10	35235
			F26DBX/835/4P	3500	82	1800	10000	10	35248
			F26DBX/840/4P	4000	82	1800	10000	10	35236

*90% lumen output -
even at extreme
temperatures*



Biax T

- *GE compact fluorescent lamps with amalgam technology give you high light output despite intense cold and intense heat.*
- *Ideal for outdoor installations.*
- *More light per unit of energy consumed.*
- *GE Biax with amalgam even lets you install your lamp at any angle with no loss of light output.*

Energy-saving compact fluorescent lamps providing consistent performance in all weathers.

Applications:

retail, displays, reception areas, interior and exterior lighting.

Biax lamps use GE's new amalgam dosing technology to give a consistent high output through life, irrespective of variations in temperature and the angles of installation. Choose Biax - in a wide range of shapes, formats and outputs - to suit all your compact fluorescent needs.

Rapid start and flicker-free operation.

Wide range of compact fluorescent lamps with amalgam.

GE offers amalgam not only in its traditional CFL range, but also for unique products such as 2D lamps.

Light output independent of orientation.

GE's CFLs offer the same light output in any burning position, letting the application - not the lamp - dictate the format and design of luminaires.

Still produces 90% of maximum light output at extremes of temperature.

GE's CFLs with amalgam still produce 90% of maximum light output at temperatures down to -6°C and as high as +65°C.

Dramatically improved lumen efficiency in enclosed luminaires.

Near perfect optical transparency means there's no need to over specify lamps for lumen loss, providing further savings in capital and running costs.

Biax[®]

GE Biax lamps offer up to 80% energy savings compared to equivalent incandescent lamps and last up to 10 times longer.



Biax[®] L

- Stretched full length source with 4 pin base designed for 600mm square light fittings
- Replaces linear fluorescents twice the length
- Single-ended for simpler installation
- Round loop construction means no dark ends
- High surface brightness for improved optical control
- Polyflux phosphors allow matching with other fluorescents



Biax[®] S & S/E

- Biax S with 2 pin base and extra compact design to suit reduced size fittings
- Biax S/E with 4 pin base and external starter / controls for use with electronic control gear and dimming and emergency lighting applications
- 5 times more efficient than GLS lamps
- 9 times less maintenance compared to GLS lamps
- High colour rendering - matching the colour temperatures of incandescents



Biax[®] D & D/E

- 2 pin or 4 pin formats
- Light quality and colour performance to match other fluorescents
- High colour reproduction performance, providing rich, vibrant colours
- Wide range of wattages to suit all applications



Biax[®] T & T/E

- High colour reproduction performance, providing rich, vibrant colours
- Consistent high light output, irrespective of ambient temperature and the angle of installation
- New slimmer 49mm base



Biax[®] Q/E

- 4 pin lamp base
- Unique eight-legged design providing high output in even more compact form
- High colour reproduction performance, providing rich, vibrant colours
- Shorter lamp - ideal for more compact light fitting designs

Compact Fluorescent

Biax® T - 2 pin with Amalgam

Watts	Length mm	Cap	Product Description	CCT °K	CRI Ra	Rated		Pack Qty	Product Code
						Initial Lumens	Average Life Hours		
13	115.5	GX24d-1	F13TBX/827	2700	82	900	10000	6	35940
			F13TBX/830	3000	82	900	10000	6	35966
			F13TBX/835	3500	82	900	10000	6	35943
			F13TBX/840	4000	82	900	10000	6	35941
			F13TBX/865	6500	82	900	10000	6	35949
18	130	GX24d-2	F18TBX/827	2700	82	1200	10000	6	35945
			F18TBX/830	3000	82	1200	10000	6	35944
			F18TBX/835	3500	82	1200	10000	6	35937
			F18TBX/840	4000	82	1200	10000	6	35939
			F18TBX/865	6500	82	1200	10000	6	35938
26	140	GX24d-3	F26TBX/827	2700	82	1800	10000	6	35959
			F26TBX/830	3000	82	1800	10000	6	35952
			F26TBX/835	3500	82	1800	10000	6	35963
			F26TBX/840	4000	82	1800	10000	6	35964
			F26TBX/865	6500	82	1800	10000	6	35965



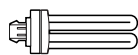
Biax® T/E - 4 pin with Amalgam

Watts	Length mm	Cap	Product Description	CCT K	CRI Ra	Rated		Pack Qty	Product Code
						Initial Lumens	Average Life Hours		
13	108	GX24q-1	F13TBX/827/A/4P	2700	82	900	10000	10	34391
			F13TBX/830/A/4P	3000	82	900	10000	10	34395
			F13TBX/835/A/4P	3500	82	900	10000	10	34400
			F13TBX/840/A/4P	4000	82	900	10000	10	34387
18	122.5	GX24q-2	F18TBX/827/A/4P	2700	82	1200	10000	10	34392
			F18TBX/830/A/4P	3000	82	1200	10000	10	34396
			F18TBX/835/A/4P	3500	82	1200	10000	10	34405
			F18TBX/840/A/4P	4000	82	1200	10000	10	34385
26	132.5	GX24q-3	F26TBX/827/A/4P	2700	82	1800	10000	10	34393
			F26TBX/830/A/4P	3000	82	1800	10000	10	34397
			F26TBX/835/A/4P	3500	82	1800	10000	10	34406
			F26TBX/840/A/4P	4000	82	1800	10000	10	34381
32	149.5	GX24q-3	F32TBX/827/A/4P	2700	82	2200	10000	10	34394
			F32TBX/830/A/4P	3000	82	2200	10000	10	34399
			F32TBX/835/A/4P	3500	82	2200	10000	10	34388
			F32TBX/840/A/4P	4000	82	2200	10000	10	34380



Compact Fluorescent

Biax® Q/E - 4 pin with Amalgam



Watts	Length mm	Cap	Product Description	CCT °K	CRI Ra	Initial Lumens	Rated		Pack Qty	Product Code
							Average Life Hours			
42	154.5	GX24q-4	F42QBX/830/A/4P	3000	82	3200	10000		6	44795
42	154.5	GX24q-4	F42QBX/835/A/4P	3500	82	3200	10000		6	34834
42	154.5	GX24q-4	F42QBX/840/A/4P	4000	82	3200	10000		6	44796

Biax® 2D® - 2 pin



Watts	Diam mm	Cap	Product Description	CCT K	CRI Ra	Initial Lumens	Rated		Pack Qty	Product Code
							Average Life Hours			
16	140	GR8	F162D/827	2700	82	1050	10000		20	32416
			F162D/835	3500	82	1050	10000		20	32419
			F162D/860	6000	82	1050	10000		20	32454
28	202	GR8	F282D/827	2700	82	2050	10000		20	34515

Biax® 2D®/E - 4 pin



Watts	Diam mm	Cap	Product Description	CCT K	CRI Ra	Initial Lumens	Rated		Pack Qty	Product Code
							Average Life Hours			
10	92	GR10q	F102D/827/4P	2700	82	650	10000		5	29433
			F102D/835/4P	3500	82	650	10000		5	28366
16	140	GR10q	F162D/827/4P	2700	82	1050	10000		20	32422
			F162D/835/4P	3500	82	1050	10000		20	32425
21	140	GR10q	F212D/827/4P	2700	82	1350	10000		20	32430
			F212D/835/4P	3500	82	1350	10000		20	32431
			F212D/860/4P	6000	82	1350	10000		20	32453
28	202	GR10q	F282D/827/4P	2700	82	2050	10000		20	34546
			F282D/835/4P	3500	82	2050	10000		20	34550
			F282D/840/4P	4000	82	2050	10000		20	37510
38	202	GR10q	F382D/827/4P	2700	82	2850	10000		20	34544
			F382D/835/4P	3500	82	2850	10000		20	34549
55	202	GR10q-3	F552D/827/A/4P	2700	82	4000	10000		20	37523
			F552D/835/A/4P	3500	82	4000	10000		20	37528

Replacement Lamps - High Power Factor



Watts	Length mm	Cap	Product Description	CCT K	CRI Ra	Initial Lumens	Rated		Energy Pack Efficiency Class	Product Code
							Average Life Hours			
13	115.5	Inv	F13TBX/I/827	2700	82	900	12000		6 A	25799
13	115.5	Inv	F13TBX/I/830	3000	82	900	12000		6 A	25800
13	115.5	Inv	F13TBX/I/835	3500	82	900	12000		6 A	25801
13	115.5	Inv	F13TBX/I/840	4000	82	900	12000		6 A	25820
18	130	Inv	F18TBX/I/827	2700	82	1200	12000		6 A	25802
18	130	Inv	F18TBX/I/830	3000	82	1200	12000		6 A	25803
18	130	Inv	F18TBX/I/835	3500	82	1200	12000		6 A	25804
18	130	Inv	F18TBX/I/840	4000	82	1200	12000		6 A	25821

Note: These are replacement lamps for the High Power Factor Lamp and Adaptor on Page 84

*Choose Biax 2D
for circular light
distribution*



Biax 2D

- *A GE developed and patented innovation that provides circular light output.*
- *Low profile design makes it ideal for wall or ceiling fittings.*
- *High output in any burning position and at very low or high temperatures.*



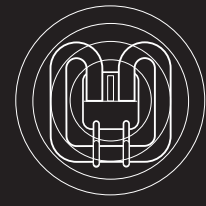
Biax 2D installed in an attractive slimline light fitting.

Applications:
residential lighting
corridors, security lighting,
interior and exterior.

2D's unique shallow, circular format means that light spreads out uniformly all around the lamp with no shadows.

- Biax 2D gives you:**
- A more uniform light**
 - A more attractive light** with a range of colours.
 - A more versatile light** amalgam technology lets you, not the lamp dictate the design of fittings.
 - A more efficient light** A 2D 16W lamp replaces a 75 watt GLS lamp - saving energy and giving 10 times longer life.

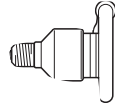
A more powerful light
GE's new Biax 55 Watt 2D gives you high 3900 lumen output in the same 28/38W size.



Biax 2D

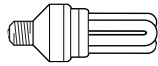
Compact Fluorescent

Biax® 2D® and Adaptor



Watts	Cap	Product Description	Initial Lumens	Rated		Pack Qty	Product Code
				Average Life Hours	Energy Efficiency		
2D Lamp with Electronic Adaptor							
13	B22	FEA102D/827/B22	700	10000	6		35718
13	E27	FEA102D/827/E27	700	10000	6		35717

Electronic Biax® HPF Lamps and Adaptors



Watts	Volts	Length		Cap	Product Description	CCT K	CRI Ra	Initial Lumens	Rated		Pack Qty	Energy Efficiency Class	Product Code
		mm	mm						Average Life Hours	Energy Efficiency			
15	230/240	150	150	E27	FLE15TBX/L+Ad/827/E27	2700	82	900	12000	6	A	35520	
				E27	FLE15TBX/L+Ad/840/E27	4000	82	900	12000	6	A	35543	
		B22	FLE15TBX/L+Ad/827/B22	2700	82	900	12000	6	A	35497			
20	230/240	150	150	B22	FLE15TBX/L+Ad/840/B22	4000	82	900	12000	6	A	35521	
				E27	FLE20TBX/L+Ad/827/E27	2700	82	1200	12000	6	A	35495	
		E27	FLE20TBX/L+Ad/840/E27	4000	82	1200	12000	6	A	35548			
		B22	FLE20TBX/L+Ad/827/B22	2700	82	1200	12000	6	A	35496			
		B22	FLE20TBX/L+Ad/840/B22	4000	82	1200	12000	6	A	35553			

Electronic Biax® M



Watts	Volts	Length		Cap	Product Description	CCT K	CRI Ra	Initial Lumens	Rated		Pack Qty	Energy Efficiency Class	Product Code
		mm	mm						Average Life Hours	Energy Efficiency			
9	230/240	139.5	139.5	E14	FLE9DBX/827/M	2700	82	480	12000	6	A	36637	
11	230/240	144	144	E14	FLE11DBX/827/M	2700	82	600	12000	6	A	36613	

Electronic Biax® D



Watts	Volts	Length		Cap	Product Description	CCT K	CRI Ra	Initial Lumens	Rated		Pack Qty	Energy Efficiency Class	Product Code
		mm	mm						Average Life Hours	Energy Efficiency			
9	230/240	138	138	E27	FLE9DBX/827	2700	82	480	12000	6	A	36611	
9	230/240	137	137	B22	FLE9DBX/827	2700	82	480	12000	6	A	36668	
11	230/240	142.5	142.5	E27	FLE11DBX/827/S	2700	82	600	12000	6	A	36615	
11	230/240	142.5	142.5	E27	FLE 11DBX/840/S	4000	82	600	12000	6	A	36648	
11	230/240	143	143	B22	FLE11DBX/827	2700	82	600	12000	6	A	36664	
11	230/240	143	143	B22	FLE11DBX/840	4000	82	600	12000	6	A	36671	

Electronic Biax® T - with Amalgam



Watts	Volts	Length		Cap	Product Description	CCT K	CRI Ra	Initial Lumens	Rated		Pack Qty	Energy Efficiency Class	Product Code
		mm	mm						Average Life Hours	Energy Efficiency			
15	230/240	135.5	135.5	E27	FLE15TBX/L/827	2700	82	900	12000	6	A	36272	
				E27	FLE15TBX/L/840	4000	82	900	12000	6	A	36273	
		E27	FLE15TBX/L/865	6500	82	900	12000	6	A	36274			
		B22	FLE15TBX/L/827	2700	82	900	12000	6	A	36275			
		B22	FLE15TBX/L/840	4000	82	900	12000	6	A	36276			
		B22	FLE15TBX/L/865	6500	82	900	12000	6	A	36277			
20	230/240	150	150	E27	FLE20TBX/L/827	2700	82	1200	12000	6	A	36280	
				E27	FLE20TBX/L/840	4000	82	1200	12000	6	A	36282	
		E27	FLE20/TBX/L/865	6500	82	1200	12000	6	A	36283			
		B22	FLE20TBX/L/827	2700	82	1200	12000	6	A	36284			
		B22	FLE20TBX/L/840	4000	82	1200	12000	6	A	36285			
		B22	FLE20TBX/L/865	6500	82	1200	12000	6	A	36288			
23	230/240	173.5	173.5	E27	FLE23TBX/827	2700	82	1500	12000	6	A	36646	
				E27	FLE23TBX/840	4000	82	1500	12000	6	A	36650	
		E27	FLE23TBX/865	6500	82	1500	12000	6	A	36659			
		B22	FLE23TBX/827	2700	82	1500	12000	6	A	36666			
		B22	FLE23TBX/840	4000	82	1500	12000	6	A	36673			
		B22	FLE23TBX/865	6500	82	1500	12000	6	A	36680			

Install energy-saving light wherever a conventional lamp is fitted



Electronic Globe



Electronic Biax® T

- *Instant retrofit lamps that fit in your existing incandescent lamp fittings.*
- *Take full advantage of compact fluorescent's long life, energy-saving qualities.*

An energy-saving Biax decorative globe provides all the beauty and warmth of a standard incandescent lamp.

Applications:

retail, displays, reception areas, restaurants and residential interior lighting.

Easy installation - with conventional screw or bayonet fittings - and a wide range of wattages to match incandescent lamps, mean you can add energy-saving GE Electronic Biax lamps almost anywhere.

GE Electronic Biax lamps offer:

10,000 - 12,000 hours life
10-12 times longer than a standard GLS lamp.

Warm colour
to match incandescent lamps.

Energy-saving up to 80%
compared to GLS lamps.

Rapid start and flicker-free operation

Immediate retrofit
replaces incandescent reflector lamps.

Electronic Biax®

GE Electronic Biax lamps offer up to 80% energy savings compared to equivalent incandescent lamps and last up to 12 times longer.



Electronic Biax[®] M & D

- Fits straight into incandescent fittings
- Warm colour to match incandescent lamps
- High colour reproduction performance, providing rich, vibrant colours



Electronic Biax[®] T

- Fits straight into incandescent fittings
- High output and short overall length for maximum application versatility
- High colour reproduction performance, providing rich, vibrant colours
- Consistent high light output, irrespective of ambient temperature and the angle of installation
- Round loop construction means no dark ends



Electronic Biax[®] Q

- Fits straight into incandescent fittings
- High light output with minimum overall length - ideal for compact light fitting designs
- Similar size to incandescent lamps
- Use almost anywhere an incandescent lamp is fitted
- High colour reproduction performance, providing rich, vibrant colours
- Consistent high light output, irrespective of ambient temperature and the angle of installation



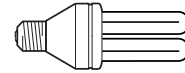
Electronic Biax[®] Globes

- Fits straight into incandescent fittings
- Light quality to match incandescent globe lamps
- Glass globe construction for strength and professional appearance
- 11, 15 and 20 watt outputs to suit all applications

Compact Fluorescent

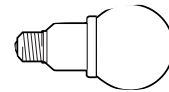
Electronic Biax® Q - with Amalgam

Watts	Volts	Length		Product Description	CCT	K	CRI	Ra	Rated			Product Code
		mm	Cap						Initial Lumens	Average Life Hours	Pack Qty	
23	230/240	159	E27	FLE23QBX/827	2700	82	1500	12000	6		36617	
23	230/240	159	E27	FLE23QBX/840	4000	82	1500	12000	6		36647	
23	230/240	159	B22	FLE23QBX/827	2700	82	1500	12000	6		36667	
23	230/240	159	B22	FLE23QBX/840	4000	82	1500	12000	6		36670	



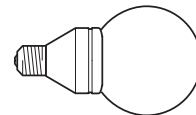
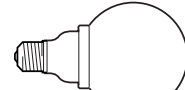
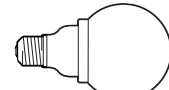
Electronic Biax® Globe

Watts	Volts	Length		Product Description	CCT	K	CRI	Ra	Rated			Product Code
		mm	Cap						Initial Lumens	Average Life Hours	Pack Qty	
11	230/240	152	E27	FLE11DBX/827/GG	2700	82	450	10000	6		36610	



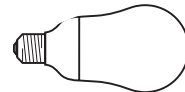
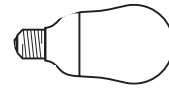
Electronic Biax® Globe - with Amalgam

Watts	Volts	Length		Product Description	CCT	K	CRI	Ra	Rated			Product Code
		mm	Cap						Initial Lumens	Average Life Hours	Pack Qty	
15	230/240	152	E27	FLE15TBX/L/827/GG	2700	82	750	10000	6		36278	
20	230/240	180	E27	FLE20TBX/L/827/GG	2700	82	1050	10000	6		36292	
23	230/240	193	E27	FLE23QBX/L/827/GG	2700	82	1250	10000	6		36417	



Electronic Biax® GLS*

Watts	Volts	Length		Product Description	CCT	K	CRI	Ra	Rated			Energy Efficiency Class	Product Code
		mm	Cap						Initial Lumens	Average Life Hours	Pack Qty		
9	230/240	139	E27	FLE9DBX/GLS/827/0 E27 DCBL	2700	79	390	6000	6	B	37449		
14	230/240	139	E27	FLE14TBX/GLS/827/0 E27 DCBL	2700	79	540	6000	6	B	37445		
15	230/240	144	E27	FLE15TBX/GLS/827/0 E27 DCBL	2700	79	750	6000	6	B	37721		
20	230/240	158	E27	FLE20TBX/GLS/827/0 E27 DCBL	2700	79	1050	6000	6	B	37725		



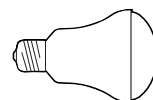
Electronic Biax® Candle*

Watts	Volts	Length		Product Description	CCT	K	CRI	Ra	Rated			Energy Efficiency Class	Product Code
		mm	Cap						Initial Lumens	Average Life Hours	Pack Qty		
5	230/240	150	E14	FLE5/DBX/CDL/827/0 E14 DCBL	2700	82	170	4000	6	B	37428		
5	230/240	150	B22	FLE5/DBX/CDL/827/0 B22 DCBL	2700	82	170	4000	6	B	37430		



Genura® R80 Induction lamp

Watts	Volts	Length		Product Description	CCT	K	CRI	Ra	Rated			Energy Efficiency Class	Product Code
		mm	Cap						Initial Lumens	Average Life Hours	Pack Qty		
23	220-240	131	E27	EFL/23W/827 R80	2700	82	1100	15000	6	A	36618		
23	220-240	131	E27	EFL/23W/830 R80	3000	82	1100	15000	6	A	36624		



* Available from June 99



Genura

Genura loves life - hates maintenance



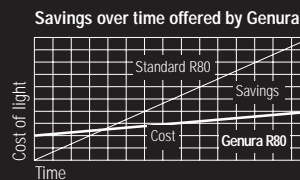
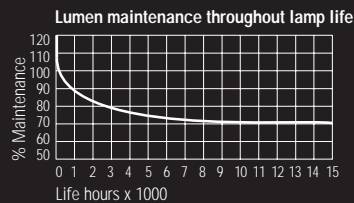
Outstanding 15,000 hours life.

Fast warm-up time of under a minute.

Available in two colour temperatures to suit your lighting requirements.

Cuts lighting maintenance costs with 15,000 hours lamp life* regardless of switching on and off.

Familiar reflector shape Saves up to 80% on energy and therefore effectively pays for itself.



*According to IEC standard 969.



Genura R80



Standard R80

- *Genura - the unique GE invented lamp that saves up to 80% on energy and gives outstandingly long-life - up to 15 times longer than standard incandescents.*
- *Similar size and shape as a standard incandescent R80 reflector lamp up to 100W, and works with existing fittings.*
- *No compromise on beauty - Genura looks as good as a conventional reflector lamp.*

Low maintenance reflector lamps at Copenhagen Airport, Denmark.

Applications:

interior public areas and residential interior lighting.

Compact Fluorescent lamps

GE Biax compact fluorescents come in two lamp types - plug-in and electronic. Whilst a majority of the features described here apply to both lamp types, plug in lamps require separate running gear and the gear used can effect the lamp's performance characteristics.

Warm-up times

GE Biax lamps offer an almost instant start, but require a few minutes to reach full brightness, particularly in colder temperatures. This slight time lag may make the lamp initially appear dull.

Amalgam technology

GE amalgam dosing technology provides a more consistent light output, not only through lamp life, but also in varying ambient temperatures and lamp orientations.

Using outside

When Biax lamps are employed outdoors, they must be used in enclosed fittings. The lamps will reach full brightness when the ambient temperature around the lamp reaches approximately 25°C. The effects of different ambient temperatures on light output for typical lamps is shown in the chart Fig 1. With amalgam products, 90% of light output is achieved between the temperatures of -6°C and +65°C.

Enhancing colour quality

While the colour temperature of Biax is similar to an equivalent incandescent lamp (it produces the same 'whiteness' of light), the colour rendering performance (its ability to accurately reproduce colours) is slightly lower. It is this difference that may lead some users to feel that the light appears dull. However, Biax lamps, which use Polylux triphosphors, are far better at rendering colours than most commonly available fluorescent tubes.

Characteristics of electronic lamps

Dimming of electronic retrofit lamps

As the electronic gear in the base of these lamps needs a full and constant current, they cannot be dimmed or used with other electronic switching devices.

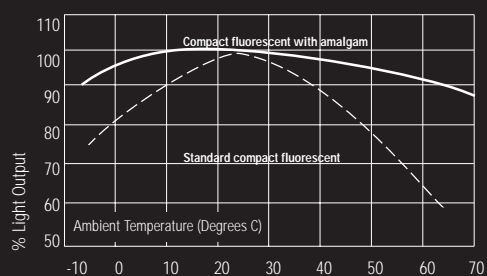
Eliminating flicker

Biax lamps operate at very high frequencies thus avoiding the annoying flicker typical of some fluorescent installations operating with conventional control gear.

Using existing fittings

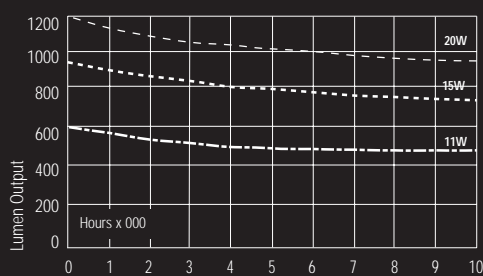
Biax lamps are much lighter than many conventional retrofit compact fluorescent lamps and therefore do not impose exceptional loads on light fittings.

Fig 1 Light output relative to ambient temperature



Biax maintains an acceptable level of light output within a normal range of temperatures.

Lumen maintenance characteristics of Biax and Electronic Biax lamps



One of the characteristics of Biax is a very low fall off in light output over the life of the lamp.

Brand cross-reference

Watts	Family / Description		Osram	Philips	Sylvania
	Biax L 4pin		Dulux-L	PL-LL	Lynx L-LE
18W	F18BX/827	Polylux 2700	18W DL 18/82	–	CF-L 18W/827
	F18BX/830	3000	18W DL 18/83	18W PLL 83	CF-L 18W/830
	F18BX/835	3500	18W DL 18/85	–	–
	F18BX/840	4000	18W DL 18/84	18W PLL 84	CF-L 18W/840
24W	F24BX/827	Polylux 2700	24W DL 24/82	–	CF-L 24W/827
	F24BX/830	3000	24W DL 24/83	24W PLL 83	CF-L 24W/830
	F24BX/835	3500	24W DL 24/35	–	–
	F24BX/840	4000	24W DL 24/84	24W PLL 84	CF-L 24W/840
34W	F34BX/830	Polylux 3000	–	–	–
	F34BX1835	3500	–	–	–
	F34BX/840	4000	–	–	–
36W	F36BX/827	Polylux 2700	36W DL 36/82	–	CF-L 36W/827
	F36BX/830	3000	36W DL 36/83	36W PLL 83	CF-L 36W/830
	F36BX/835	3500	36W DL 36/35	–	–
	F36BX/840	4000	36W DL 36/84	36W PLL 84	CF-L 36W/840
40W	F40BX/830	Polylux 3000	40W DL 40/83	40W PLL 83	CF-LE 40W/830
	F40BX/835	3500	40W DL 40/35	–	–
	F40BX/840	4000	40W DL 40/84	40W PLL 84	CF-LE 40W/840
	F55BX/830	Polylux 3000	55W DL 55/83	55W PLL 83	CF-LE 55W/830
55W	F55BX/835	3500	55W DL 55/35	–	–
	F55BX/840	4000	55W DL 55/84	55W PLL 84	CF-LE 55W/840
		Biax S 2pin	Dulux S	PLS	Lynx-S
5W	F5BX/827	Polylux 2700	5W DS 5/827	5W PLS 82	CF-S 5W/827
	F5BX/835	3500	5W DS 5/835	–	–
	F5BX/840	4000	5W DS 5/840	–	CF-S 5W/840
7W	F7BX/827	Polylux 2700	7W DS 7/827	7W PLS 82	CF-S 7W/827
	F7BX/835	3500	7W DS 7/835	–	–
	F7BX/840	4000	7W DS 7/840	7W PLS 84	CF-S 7W/840
9W	F9BX/827	Polylux 2700	9W DS 9/827	9W PLS 82	CF-S 9W/827
	F9BX/835	3500	9W DS 9/835	–	–
	F9BX/840	4000	9W DS 9/840	9W PLS 84	CF-S 9W/840
11W	F11BX/827	Polylux 2700	11WDS 11/827	11W PLS 82	CF-S 11W/827
	F11BX/835	3500	11WDS 11/835	–	–
	F11BX/840	4000	11WDS 11/840	11W PLS 84	CF-S 11W/840
	Biax S/E 4pin	Dulux-SE	PLS	Lynx - SE	
5W	F5BX/827/4P	Polylux 2700	5W DSE 5/82	5W PLS 82/4P	CF-SE SW/827
	F5BX/840/4P	4000	5W DSE 5/84	5W PLS 84/4P	CF-SE SW/840
7W	F7BX/827/4P	Polylux 2700	7W DSE 7/82	7W PLS 82/4P	CF-SE 7W/827
	F7BX/840/4P	4000	7W DSE 7/84	7W PLS 84/4P	CF-SE 7W/840
9W	F9BX/827/4P	Polylux 2700	9W DSE 9/82	9W PLS 82/4P	CF-SE 9W/827
	F9BX/840/4P	4000	9W DSE 9/84	9W PLS 84/4P	CF-SE 9W/840
11W	F11BX/827/4P	Polylux 2700	11W DSE 11/4	11W PLS82/4P	CF-SE 11W/827
	F11BX/840/4P	4000	11W DSE 11/2	11W PLS84/4P	CF-SE 11W/840
	Biax D 2pin	Dulux-D	PL-C	Lynx-D	
10W	F10DBX/827	Polylux 2700	10W DD 10/82	10W PLC 82	CF-D 10W/827
	F10DBX/830	3000	–	–	CF-D 10W/830
	F10DBX/835	3500	10W D 10/835	–	–
	F10DBX/840	4000	10W DD 10/84	10W PLC 84	CF-D 10W/840
13W	F13DBX/827	Polylux 2700	13W DD 13/82	13W PLC 82	CF-D 13W/827
	F13DBX/830	3000	–	–	CF-D 13W/830
	F13DBX/835	3500	13W D 13/835	–	–
	F13DBX/840	4000	13W DD 13/84	13W PLC 84	CF-D 13W/840
18W	F18DBX/827	Polylux 2700	18W DD 18/82	18W PLC 82	CF-D 18W/827
	F18DBX/830	3000	18W DD 18/33	–	CF-D 18W/830
	F18DBX/835	3500	18W D 18/835	–	–
	F18DBX/840	4000	18W DD 18/84	18W PLC 84	CF-D 18W/840
26W	F26DBX/827	Polylux 2700	26W DD 26/82	26W PLC 82	CF-D 26W/827
	F26DBX/830	3000	26W DD 26/83	–	CF-D 26W/830
	F26DBX/835	3500	26W D 26/835	–	–
	F26DBX/840	4000	26W DD 26/84	26W PLC 84	CF-D 26W/840
	Biax D/E 4pin	Dulux-DE	PL-C	Lynx-DE	
10W	F10DBX/827/4P	Polylux 2700	10W DDE 10/2	10WPLC 82/4P	CF-DE 10W/827
	F10DBX/830/4P	3000	10W DDE 10/3	–	–
	F10DBX/835/4P	3500	10W DDE 10/35	–	–
	F10DBX/840/4P	4000	10W DDE 10/4	10WPLC 84/4P	CF-DE 10W/840
13W	F13DBX/827/4P	Polylux 2700	13W DDE 13/2	13WPLC 82/4P	CF-DE 13W/827
	F13DBX/830/4P	3000	13W DDE 13/3	–	–
	F13DBX/835/4P	3500	13W DE 13/35	–	–
	F13DBX/840/4P	4000	13W DDE 13/4	13WPLC 84/4P	CF-DE 13W/840
18W	F18DBX/827/4P	Polylux 2700	18W DDE 18/2	18WPLC 82/4P	CF-DE 18W/827
	F18DBX/830/4P	3000	18W DDE 18/3	–	–
	F18DBX/835/4P	3500	18W DE 18/35	–	–
	F18DBX/840/4P	4000	18W DDE 18/4	18WPLC 84/4P	CF-DE 18W/840
26W	F26DBX/827/4P	Polylux 2700	26W DDE 26/2	26WPLC 82/4P	CF-DE 26W/827
	F26DBX/830/4P	3000	26W DDE 26/3	–	–
	F26DBX/835/4P	3500	26W DE 26/35	–	–
	F26DBX/840/4P	4000	26W DDE 26/4	26WPLC 84/4P	CF-DE 26W/840

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.

Watts	Family / Description		Osram	Philips	Sylvania		
13W	Biax T 2pin		Dulux T	Dulux T IN	PL-T	Lynx-S	
	F13TBX/827/A	Polylux 2700	13W/41-827	-	-	-	
	F13TBX/830/A	3000	13W/31-830	-	-	-	
	F13TBX/835/A	3500	-	-	-	-	
18W	F13TBX/840/A		4000	13W/21-840	-	-	
	F18TBX/827/A	Polylux 2700	18W/41-827	18W/41-827-IN	PL-T18-2pin 827	CF-T18W/827	
	F18TBX/830/A	3000	18W/31-830	18W/31-830-IN	PL-T18-2pin 830	CF-T 18W/830	
	F18TBX/835/A	3500	-	-	-	-	
26W	F18TBX/840/A		4000	18W/21-840	18W/21-840-IN	PL-T18-2pin 840	CF-T18W/840
	F26TBX/827/A	Polylux 2700	26W/41-827	26W/41-827-IN	PL-T26-2pin 827	CF-T26W/827	
	F26TBX/830/A	3000	26W/31-830	26W/31-830-IN	PL-T26-2pin 830	CF-T26W/830	
	F26TBX/835/A	3500	-	-	-	-	
F26TBX/840/A		4000	26W/21-840	26W/21-840-IN	PL-T26-2pin 840	CF-T26W/840	
13W	Biax T/E 4pin		Dulux- T/E	Dulux T/E IN	PL-T	Lynx- TE	
	F13TBX/827/4P	Polylux 2700	13W/41-827	-	-	-	
	F13TBX/830/4P	3000	13W/31-830	-	-	-	
	F13TBX/835/4P	3500	-	-	-	-	
18W	F13TBX/840/4P		4000	13W/21-840	-	-	
	F18TBX/827/4P	Polylux 2700	18W/41-827	18W/41-827-IN	PL-T18-4pin 827	CF-TE18W/827	
	F18TBX/830/4P	3000	18W/31-830	18W/31-830-IN	PL-T18-4pin 830	CF-TE18W/830	
	F18TBX/835/4P	3500	-	-	-	-	
26W	F18TBX/840/4P		4000	18W/21-840	18W/21-840-IN	PL-T18-4pin 840	CF-TE18W/840
	F26TBX/827/4P	Polylux 2700	26W/41-827	26W/41-827-IN	PL-T26-4pin 827	CF-TE26W/827	
	F26TBX/830/4P	3000	26W/31-830	26W/31-830-IN	PL-T26-4pin 830	CF-TE26W/830	
	F26TBX/835/4P	3500	-	-	-	-	
32W	F26TBX/840/4P		4000	26W/21-840	26W/21-840-IN	PL-T26-4pin 840	CF-TE26W/840
	F32TBX/827/4P	Polylux 2700	32W/41-827	32W/41-827-IN	PL-T32-4pin 827	CF-TE32W/627	
	F32TBX/830/4P	3000	32W/31-830	32W/31-830-IN	PL-T32-4pin 830	CF-TE32W/830	
	F32TBX/835/4P	3500	-	-	-	-	
F32TBX/840/4P		4000	32W/21-840	32W/21-840-IN	PL-T32-4pin 840	CF-TE32W/840	
42W	Biax Q/E 4pin						
	F42QBX/830/A/4P	Polylux 3000	-	-	-	-	
	F42QBX/835/A/4P	3500	-	-	-	-	
F42QBX/830/A/4P	4000	-	-	-	-		
9W	Electronic Biax M		Dulux EL		Mini Lynx		
	FLE9DBX/827/S E14	Polylux 2700	ES 7W/41-827 E14	-	-	-	
11W	FLE11DBX/827/S E14	Polylux 2700	ES 11W/41-827 E14	-	-	-	
9W	Electronic Biax D		Dulux EL	PLEC	Mini Lynx		
	FLE9DBX/827 E27	Polylux 2700	ES 7W D7EST Interna	-	-	-	
	FLE9DBX/827 B22/240	2700	ES 7W/41-827 E27	-	M/Lynx 7W/E27/827		
	FLE9DBX/827 B22	2700	BC 7W D7BCT Interna	-	M/Lynx 7W/B22/827		
11W	FLE11DBX/827E27		Polylux 2700	ES 11W D11EST Interna	11W PLECES82	-	
	FLE11DBX/827/S E27	2700	ES 11W/41-827 E27	-	M/Lynx 11W/E27/827		
	FLE11DBX/827 B22	2700	BC 11W D11BCT Interna	11W PLECBC82	M/Lynx11W/B22/827		
	FLE11DBX/840 E27	4000	-	-	-	-	
	FLE11DBX/840/S E27	4000	-	-	-	-	
	FLE11DBX/840 B22	4000	-	-	-	-	
15W	Electronic Biax T		Dulux EL	PL L/T			
	FLE15TBX/L/827 B22	Polylux 2700	BC 15W D15BCN Interna	15W BCPLET82	-	-	
	FLE15TBX/L/840 B22	4000	-	-	-	-	
	FLE15TBX/L/827 E27	2700	ES 15W D1SESN Interna	15W ESPLET 82	-	-	
	FLE15TBX/L/840 E27	4000	-	-	-	-	
	FLE20TBX/L/827 B22	Polylux 2700	BC 20W D20BCN Interna	20W BCPLET 82	-	-	
20W	FLE20TBX/L/840 B22		4000	-	-	-	
	FLE20TBX/L/827 E27	2700	ES 20W D20ESN Interna	20W ESPLET 82	-	-	
	FLE20TBX/L/840 E27	4000	-	-	-	-	
	FLE23TBX/827 B22	Polylux 2700	BC 23W D23BCN Interna	23W BCPLET82	-	-	
23W	FLE23TBX/840 B22		4000	-	-	-	
	FLE23TBX/827 E27	2700	ES 23W D23ESN Interna	23W ESPLET 82	-	-	
	FLE23TBX/840 E27	4000	-	-	-	-	
	Electronic Biax Q						
23W	FLE23QBX/827 E27	Polylux 2700	-	-	-		
11W	Electronic Biax Globe		Dulux EL Globe	PL*E/D			
	FLE11DBX/827/GG						
	FLE15TBX/L/827/GG	Polylux 2700	ES 15W DGI5EN Interna	15WES PLED 82	-	-	
20W	FLE20TBX/L/827/GG	Polylux 2700	ES 20W DG20EN Interna	20WES PLED 82	-	-	
23W	Genura R80 induction lamp						
	EFL/23W/827 R80	Polylux 2700	-	-	-	-	
	EFL/23W/830 R80	Polylux 3000	-	-	-	-	
	GE	Type	Osram	Philips	SLI		
	Polylux 827	Extra Warm White	Interna 82(7)	Colour 82	Homelight Deluxe(Satin)		
	Polylux 830	WarmWhite	WarmWhite 83	Colour 83	WarmWhite Deluxe(Decor)		
	Polylux 835	White	White 35	Colour 835	-		
	Polylux 840	Cool White	Cool White 84	Colour 84	Cool White Deluxe(Buro)		
	Polylux 860	Daylight	-	Colour 86	Daylight Deluxe(Studio)		

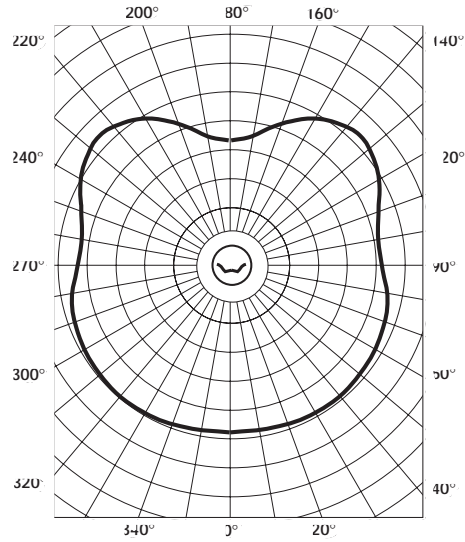
For more information on Polylux see pages 58 and 64. This cross-reference does not necessarily represent the full listing of lamps offered in alternative brands.

Biax® comparison guide

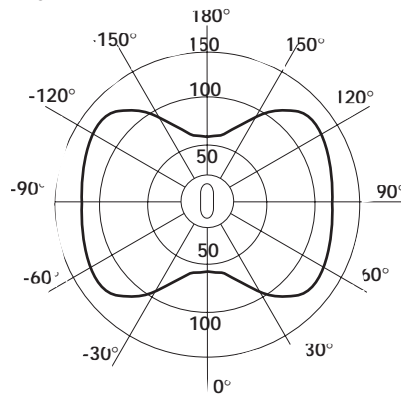
Compact Fluorescent - General Technical Data

Radial Luminous Intensity Distribution - Burning position: cap up

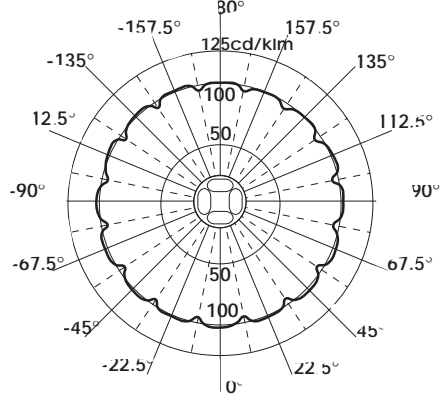
Incandescent Lamps



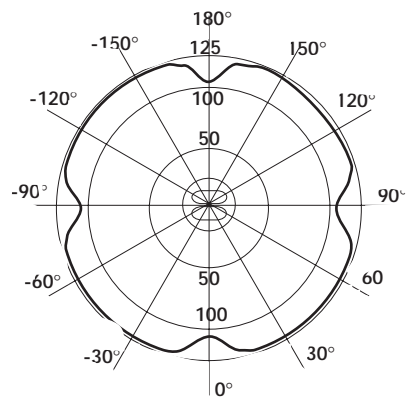
Biax[®] S
Biax[®] S/E
Biax[®] L



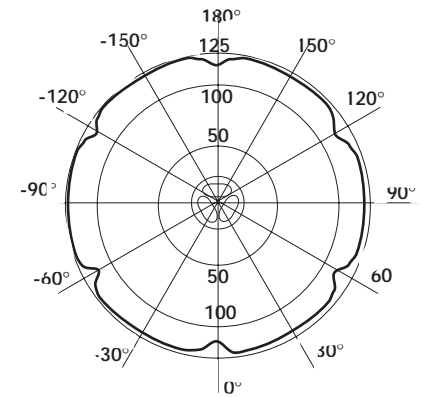
Biax[®] Q/E 42W



Biax[®] D
Biax[®] D/E



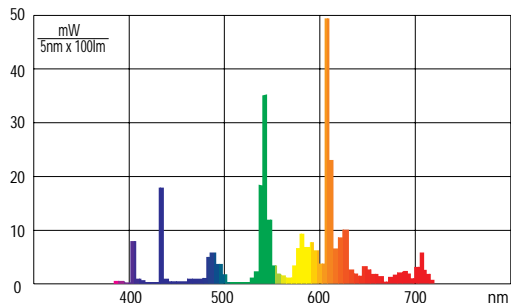
Biax[®] T
Biax[®] T/E



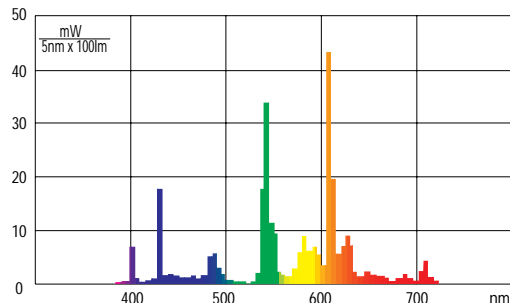
Compact Fluorescent - General Technical Data

Spectral Distribution Diagrams

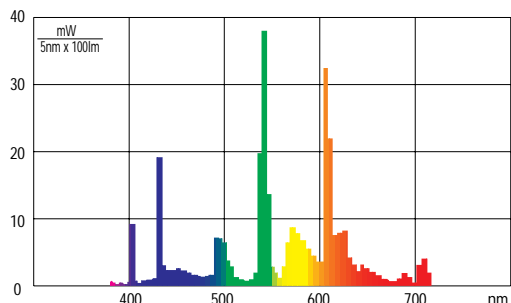
2700K



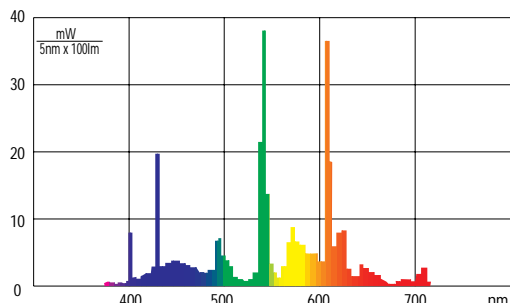
3000K



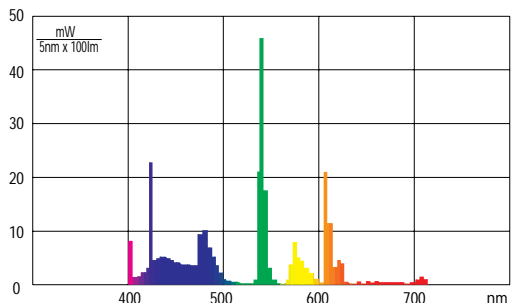
3500K



4000K



6500K



CFL technical data

High Intensity Discharge lamps (HID)

High intensity discharge lamps offer outstanding efficiency, reliability and versatility with the additional benefit of low operating costs.

The HID range can be broken down into five main lamp categories - ConstantColor CMH, metal halide, high pressure sodium, mercury and low pressure sodium.

GE invented mercury lamps in 1931¹, high pressure sodium lamps in 1962² and metal halide in 1964³. Since their inception GE has continually striven to improve the range and are able to offer a lamp for most applications ranging from outdoor floodlights, street lighting and large industrial complexes as well as effective retail display lighting.

Nearly all HID lamps require a ballast and starting gear. The matrix illustrated on page 96 shows you which lamp category is suitable for which application.

*Source: 'The General Electric Story' 1876 - 1986
- A Hall of History Publication, Schenectady,
New York, October 1989, Third Printing - Second Edition.



HID lamps provide the output and cost-efficiency required in a wide range of indoor and outdoor applications

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SOX 114

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Meadowhall, Sheffield



Selecting the right product

While all HID lamps offer outstanding efficiency and long life, there are distinct differences in performance among the five basic types of HID lamps. The following two charts should help you to understand these differences so that you can select the right lamp for your application.

Key performance criteria

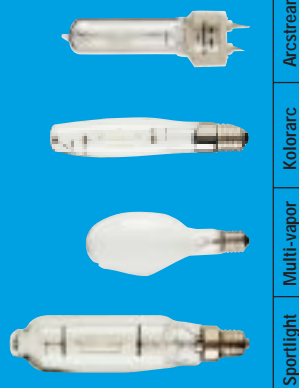
	Colour Temperature Options (K)	Colour Rendering (Ra)	Life (Hours)	Efficiency (LP/W)
ConstantColor CMH	3000 (WDL)	80+	6,000 - 9,000	90 - 95
Metal Halide	3000 (WDL) 3500 (BDL) 4000 (NDL) 6000 (DL)	65 - 93	3,500 - 20,000	68 - 100
High Pressure Sodium	2000	25 - 60	14,000 - 55,000	66 - 140
Mercury	3500 4000	42 - 52	12,000 - 24,000	19 - 63
Low Pressure Sodium	1800	-	16,000	100 - 198

Best Option
Good Option

Major applications

	Retail Display	Commercial Interior	Sports Lighting	Stadia	High Bay	Industrial	Warehouses	Amenity	Pedestrian Areas	Floodlighting	Security	Street Lighting	Highways	Horticulture
ConstantColor CMH	•	•				•		•	•	•		•	•	
Metal Halide	•	•	•	•	•	•	•	•	•	•	•	•		
High Pressure Sodium					•	•	•	•	•	•	•	•	•	•
Mercury							•	•	•	•	•	•		
Low Pressure Sodium											•	•	•	

Choose GE metal halide - and cut through the specification jungle



- *To make lamp selection easier than ever, GE has defined its metal halide range in four distinct groups - Arcstream, Kolorarc, Multi-vapor and Spotlight.*
- *GE metal halide lamps with their bright, high quality white light and energy - efficiency are ideal for a wide range of applications.*
- *Constant colour lamp to lamp throughout life.*

High quality metal halide light is ideal for illuminating colour critical public spaces such as shopping arcades and walkways.

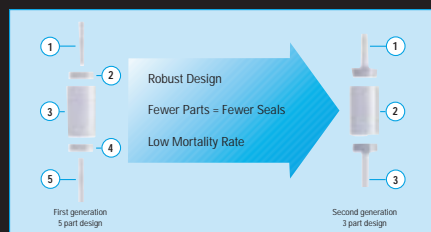
Applications:

from retail displays and office interiors to sports and floodlighting.



Ceramic Metal Halide Innovation

GE's redesigned 5 piece Arc Tube to 3 piece for greater reliability.



GE makes it easy to choose the right metal halide. Simply select the right product family for your task and preferred ballast and you will pinpoint the correct lamp for perfect results.

Arcstream

Lamps operate on high pressure sodium / metal halide ballasts incorporating thermal protection (to EN IEC 61167) with metal halide ignitors.

Kolorarc

Lamps operate on high pressure mercury ballasts with metal halide ignitor.

Multi-Vapor

Lamps operate on Constant Wattage Gear (CWA).

Sportlight

Lamps for sports and floodlighting.

Metal Halide

The full line up of metal halide lamps























Retail / Display

uplights, downlights, accent atria, commercial areas, exhibitions and retail-shopping malls, office amenity, hotels, reception areas, restaurants, billboards

Picture courtesy Selfridges

Arcstream® lamps operate on high pressure sodium/metal halide ballasts incorporating thermal protection with metal halide ignitors

	Lamp Format	Operating Position	Colour Temperature	70w	100w	150w
ConstantColor™ CMH Ceramic Metal Halide		Single Ended	U	WDL	CMH70/T/UVC/U/830/G12	CMH150/UVC/V/830/G12
		Double Ended	HOR	WDL	CMH70/TD/UVC/830/RX7s	CMH150/TD/UVC/830/RX7s-24
		Single Ended	U	WDL	ARC70/T/U/730/G12	ARC150/T/U/730/G12
				NDL	ARC70/T/U/740/G12	ARC150/T/U/740/G12
		Double Ended	HOR	WDL	ARC70/TD/UVC/730/RX7s	ARC150/TD/UVC/730/RX7s
				BDL	ARC70/TD/735/RX7s	ARC150/TD/735/RX7s
				NDL	ARC70/TD/UVC/742/RX7s	ARC150/TD/UVC/742/RX7s
				NDL	ARC70/TD/UVC/743/RX7s	ARC150/TD/UVC/743/RX7s
UV Control Filters harmful UV		Double Ended	HOR	WDL	ARC70/UVC/TD/730/RX7s	ARC150/UVC/TD/730/RX7s
				NDL	ARC70/UVC/TD/743/RX7s	ARC150/UVC/TD/743/RX7s
		Tubular Clear	HOR	NDL		
				DL		
			VBU	DL		
		Elliptical Clear	U	WDL		MXR100/U/27
			HOR	NDL		
		Elliptical Diffuse	U	WDL		MXR100/C/U/27
			HOR	NDL		
			HOR	DL		
			VBU	DL		
			Tubular Clear	HOR	DL	
			VBU	DL		
		Elliptical Clear	HOR	NDL		
			VBU	NDL		
		Elliptical Diffuse	HOR	NDL		
				DL		
			VBU	NDL		
				DL		
		Elliptical Clear	U	NDL		
			VBU	WDL		
		Elliptical Diffuse	U	WDL		
				NDL		
		VBU	WDL			
High Output More light, longer life		Elliptical Clear	HOR	NDL		
			VBU	NDL		
				NDL		
		Elliptical Diffuse	HOR	NDL		
			VBU	NDL		
		Linear	HOR	DL		
		Tubular Clear	HOR	DL		
		Hot Restrike		DL		
		Internal Ignitor		DL		
		Elliptical Clear	U	NDL		
		Elliptical Diffuse	HOR	DL		
			U	NDL		
	PAR 64	U	NDL			
	Hot Restrike	U	NDL			

Metal Halide selector

Arcstream®



Choose Arcstream with metal halide ballasts and ignitors for retail display lighting, high quality exterior floodlighting and anywhere a crisp, white light is required.

- Perfect optical control delivering a highly accurate, quality light precisely where you want it
- Long life up to 9,000 hours
- Excellent colour reproduction making it ideal for display lighting
- Good colour consistency throughout life, so your display maintains its features
- ConstantColor CMH offers a high level of colour stability and performance, making them ideal for colour critical areas

Kolorarc™



Choose Kolorarc with mercury ballasts and metal halide ignitors for commercial and industrial interiors, shopping malls and floodlighting.

- High brightness - providing high illumination levels even when installed in high ceiling areas
- High energy efficiency - offering maximum energy cost savings
- Excellent colour reproduction providing more attractive lighting environments compared to high pressure sodium and mercury arc lamps

Multi-Vapor®



Choose high output Multi-Vapor lamps with constant wattage auto-transformer (CWA) ballasts for large scale commercial and industrial interiors, shopping malls and floodlighting.

- Extra long life - of up to 20,000 hours on CWA gear
- Warm, rich colour - that gives merchandise, furnishings and decor added appeal
- High colour temperatures - to blend exceptionally well in mixed applications with incandescent, halogen and warm white fluorescent sources

Sportlight®



Choose Sportlight high wattage lamps for sports and floodlighting. The excellent colour rendering and appearance of these lamps makes them especially suitable where television cameras are used.

- Excellent optical control - with minimal beam spread even at long focal lengths
- High output - providing high illumination levels even from high towers
- Excellent colour performance - accurately reproducing colours to create more authentic and attractive floodlit environments

Metal Halide identification

The following glossary of terms and descriptions can help you when checking metal halide lamp specifications and how to use the order codes when ordering products. Within each product line, lamps are divided into families - within families, lamps are listed by wattage.

Watts:

Energy used. To find actual energy used (kWh) multiply power (watts shown) x time divided by 1000

Product Description:

The lamp's identification code

Initial Lumens:

Light output at 100 hours

Product Code:

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

Length:

Lamp length in mm

Previous Description:

Old identification code

Sportlight - Metal halide lamps for sports and floodlighting

Watts	Colour	Length	Product Description	Previous Description	Initial Lumens	Rated Average Life hours	Pack Qty.	Product Code
Hot Restrike								
2000	DL	430	SPL2000/HR/T/H/960/E40	MBID2000/T/HR	170000	5000	1	30104
Internal Ignitor								
2000	DL	430	SPL2000/I/T/H/960/E40	MBID2000/T/I	170000	5000	1	30103

Lamp:

Lamp type and product features

Colour Temperature:

WDL = > 3000 K
BDL = > 3500 K
NDL = > 4000 K
DL = > 6000 K

Rated Average Life:

The point in time when 50% of all installed lamps are still burning

Pack Quantity:

The number of lamps in one box

SPL 2000 / HR / T / H / 960 / E40

Family or Feature:

ARC: Arcstream®
CMH: ConstantColor CMH™
KRC: Kolorarc™
MPR/MVR: Multi-Vapor®
MXR: 100W - Arcstream®
175W - Multi-Vapor®
SPL: Sportlight

Lamp Format:

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

Colour Rendering:

6: Ra 60 to 69 (Group 2B)
7: Ra 70 to 79 (Group 2A)
8: Ra 80 to 89 (Group 1B)
9: Ra 90 to 99 (Group 1A)

Cap:

E27 Fc2
E40 G38
RX7s E37p
RX7sm: Modified RX7s
Spec: Special base

Wattage

Feature:

Missing: no feature
UVC: UV Control
I: Internal Ignitor
O: Open Fixture
HR: Hot Restrike

Operating Position:

Missing: TD - Horizontal;
PAR - Universal
U: Universal
H: Horizontal
VBU: Vertical Base Up
BUH: Base Up Horizontal

Colour Temperature:

XX: First 2 digits of temperature in Kelvin; xx00K.
Example: 43 is 4,300 K CCT

High Intensity Discharge

Metal Halide

Arcstream® ConstantColor™ CMH

Ceramic metal halide lamps for superior colour control and operating efficiencies

Watts	Colour	Length mm	Product Description	Previous Description	Initial Lumens	Rated		Pack Qty.	Product Code
						Average Life hours	Pack		
Single Ended									
70	WDL	88	CMH70/T/UVC/U/830/G12	CMH70/T/830/G12	6200	6000	12	36844	
150	WDL	98	CMH150/T/UVC/U/830/G12	CM150/TD/830/G12	12500	6000	12	36863	



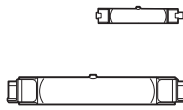
Double Ended

70	WDL	118	CMH70/TD/UVC/830/RX7s	CMH70/TD/830/RX7s	6400	9000	12	36910
150	WDL	135	CMH150/TD/UVC/830/RX7s-24	CM150/TD/830/RX7s-24	12500	9000	12	36912



Arcstream® - Metal halide lamps operating on metal halide/high pressure sodium (HPS) gear with a metal halide ignitor

Watts	Colour	Length mm	Product Description	Previous Description	Initial Lumens	Cap	Rated		Product Code
							Average Life hours	Pack Qty.	
Double Ended									
70	WDL	114	ARC70/TD/UVC/730/R7s	ARC/TD/730/R7s	6000	R7s	6000	12	34530
70	BDL	114	ARC70/TD/735/R7s	MQI/70/T6/35	6000	R7s	6000	12	32822
70	NDL	114	ARC70/TD/UVC/742/RX7s	MQI/70/T6/43	6000	RX7s	6000	12	34536
150	WDL	132	ARC150/TD/UVC/730/R7s-24	MQI/150/T7/30	13000	R7s	6000	12	34527
150	BDL	132	ARC150/TD/735/R7s-24	MQI/150/T7/35	12000	R7s	6000	12	32821
150	NDL	132	ARC150/TD/UVC/742/R7s-24	MQI/150/T7/43	12000	R7s	6000	12	34535
250	WDL	163	ARC250/TD/830/Fc2	MQI/250/T8/30	20000	Fc2	6000	12	30099
250	NDL	163	ARC250/TD/840/Fc2	MQI/250/T8/43	20000	Fc2	6000	12	30101



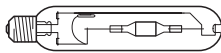
Single Ended

70	WDL	76	ARC70/T/U/730/G12	MBI70/TX/30	5200	G12	6000	20	35794
70	NDL	76	ARC70/T/U/842/G12	MBI70/TX/40	5200	G12	6000	20	35795
150	WDL	88	ARC150/T/U/830/G12	MBI150/T/30	11500	G12	6000	10	21053
150	NDL	88	ARC150/T/U/840/G12	MBI150/T/40	12000	G12	6000	10	21054



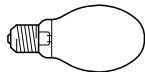
Tubular Clear

250	NDL	220	ARC250/T/H/742/E40	MBI250/T	21000	E40	6000	10	30072
250	DL	220	ARC250/T/VBU/960/E40	MBID250/T/V	19000	E40	10000	12	32665
250	DL	220	ARC250/T/H/960/E40	MBID250/T/H	19000	E40	10000	12	32664
400	NDL	260	ARC400/T/H/742/E40	MBI400/T	35000	E40	6000	10	30073



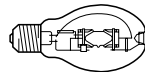
Elliptical Diffuse

100	WDL	140	MXR100/C/U/27	MXR100/C/U/27	8500	E27	15000	6	18684
250	NDL	227	ARC250/D/H/740/E40	MBI250/F/H	19500	E40	12000	10	30045
250	DL	227	ARC250/D/H/960/E40	MBID250/F/H	17000	E40	10000	12	30047
250	DL	227	ARC250/D/VBU/960/E40	MBID250/F/V	17000	E40	10000	12	32666



Elliptical Clear

100	WDL	140	MXR100/U/27	MXR100/U/27	9000	E27	15000	6	18686
250	NDL	227	ARC250/E/H/645/E40	MBI250/H	22500	E40	12000	10	28866



Arcstream® UV Control - Metal halide lamps that filter harmful UV radiation to reduce material fading

Watts	Colour	Length mm	Product Description	Previous Description	Initial Lumens	Rated		Pack Qty.	Product Code
						Average Life hours	Pack		
Double Ended									
70	WDL	114	ARC70/TD/UVC/730/RX7s	ARC70/UVC/TD/730/RX7s	5500	6000	12	34530	
70	NDL	114	ARC70/TDUVC//743/RX7s	ARC70/UVC/TD/743/RX7s	5500	6000	12	34536	
150	WDL	132	ARC150/TD/UVC/730/RX7s-24	ARC150/UVC/TD/730/RX7s	12000	6000	12	34527	
150	NDL	132	ARC150/TD/UVC/742/RX7s-24	ARC150/UVC/TD/743/RX7s	12000	6000	12	34535	



Notes: All Arcstream lamps are only suitable for 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

Kolorarc® Metal halide lamps - operating on Mercury gear with a metal halide ignitor

Watts	Colour	Length mm	Product Description	Previous Description	Initial Lumens	Rated Average Life hours	Pack Qty.	Product Code
Tubular Clear								
400	DL	270	KRC400/T/H/960/E40	MBID400/T/H	25000	10000	12	30052
400	DL	270	KRC400/T/VBU/960/E40	MBID400/T/V	28000	10000	12	30704
Elliptical Diffuse								
400	NDL	286	KRC400/D/VBU/740/E40	MBI400/F/BU	32000/37000*	14000	10	30051
400	NDL	286	KRC400/D/H/740/E40	MBI400/F/H	32000/39000*	14000	10	30050
400	DL	292	KRC400/D/VBU/960/E40	MBID400/F/V	26000	10000	4	30701
400	DL	292	KRC400/D/H/960/E40	MBID400/F/H	24000	10000	4	30053

Elliptical Clear

400	NDL	286	KRC400/E/VBU/645/E40	MBI400/BU	30500/35500*	14000	10	30048
400	NDL	286	KRC400/E/H/645/E40	MBI400/H	34000/38500*	14000	10	30049

* Enhanced performance on high output ballast

Multi-Vapor® Metal halide lamps - operating on CWA control gear

Watts	Colour	Length	Product Description	Previous Description	Initial ⁻¹ Lumens	Cap	Rated Average Life ⁻¹ hours	Pack Qty.	Product Code
Elliptical Diffuse									
175	WDL	216	MVR175/SP30/U/40	MVR175/SP30/U/40	12000	E40	10000	12	17714
175	WDL	200	MXR175/C/BU/40	MXR175/C/BU/40	15750	E40	10000	6	18952
175	NDL	216	MVR175/C/U/40	MVR175/C/U/40	13200	E40	10000	12	47763
250	WDL	216	MVR250/SP30/U/40	MVR250/SP30/U/40	18000	E40	10000	6	17715
250	NDL	216	MVR250/C/U/40	MVR250/C/U/40	19800	E40	10000	12	44543
400†	WDL	295	MVR400/SP30/VBU/40	MVR400/SP30/VBU/40	36000	E40	20000	6	21440
400†	WDL	295	MVR400/SP30/U/40	MVR400/SP30/U/40	33000	E40	20000	6	17716
400†	NDL	295	MVR400/C/U/40	MVR400/C/U/40	33900	E40	20000	6	43908
1000†	NDL	385	MVR1000/C/U/40	MVR1000/C/U/40	105000	E40	12000	6	41829
Elliptical Clear									
175	WDL	200	MXR175/BU/40	MXR175/BU/40	15750	E40	10000	6	18949
175	NDL	216	MVR175/U/40	MVR175/U/40	14000	E40	10000	12	47762
250	NDL	216	MVR250/U/40	MVR250/U/40	21000	E40	10000	6	44542
400†	NDL	295	MVR400/U/40	MVR400/U/40	36000	E40	20000	6	43907
1000†	NDL	385	MVR1000/U/40	MVR1000/U/40	110000	E40	12000	6	41828

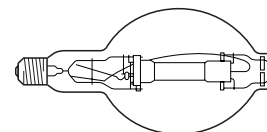
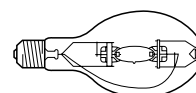
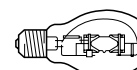
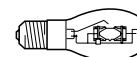
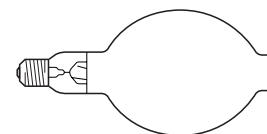
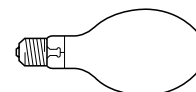
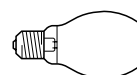
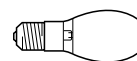
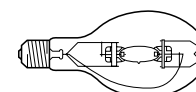
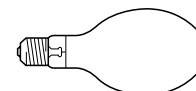
Elliptical Clear

175	WDL	200	MXR175/BU/40	MXR175/BU/40	15750	E40	10000	6	18949
175	NDL	216	MVR175/U/40	MVR175/U/40	14000	E40	10000	12	47762
250	NDL	216	MVR250/U/40	MVR250/U/40	21000	E40	10000	6	44542
400†	NDL	295	MVR400/U/40	MVR400/U/40	36000	E40	20000	6	43907
1000†	NDL	385	MVR1000/U/40	MVR1000/U/40	110000	E40	12000	6	41828

-1 Vertical orientation

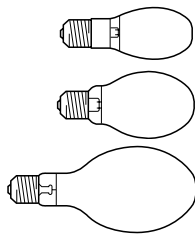
Multi-Vapor 400W and 1000W lamps marked † must use fully enclosed fixtures if burn position is other than VBU or VBD +/-15°

Notes: Kolorarc and Multi-Vapor lamps are only suitable in fully enclosed fixtures unless marked otherwise. For lamps requiring enclosed fixtures, fixture lens/diffuser material must be able to contain fragments of hot quartz or glass (up to 1100°C)

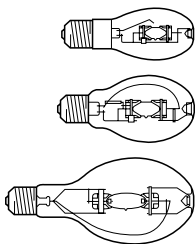


High Intensity Discharge

Multi-Vapor® High Output - More light and longer life. Operates on CWA Control Gear



Watts	Colour	Length	Product Description	Previous Description	Initial ⁻¹ Lumens	Cap	Rated Average Life ⁻¹ hours	Pack Qty.	Product Code
Elliptical Diffuse									
175	NDL	210	MVR175/C/HOR	MVR175/C/HOR	14100	E40	10000	12	18105
250	NDL	210	MVR250/C/HOR	MVR250/C/HOR	21600	E40	15000	12	18103
400	NDL	292	MVR400/C/HOR	MVR400/C/HOR	37600	E40	20000	6	18097
400	NDL	295	MVR400/C/VBU/40	MVR400/C/VBU/40	37600	E40	20000	6	49857
400	NDL	292	MPR400/C/VBU/0/40 ⁻²	MPR400/C/VBU/40	37600	E40	20000	6	36874



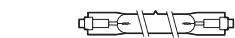
Watts	Colour	Length	Product Description	Previous Description	Initial ⁻¹ Lumens	Cap	Rated Average Life ⁻¹ hours	Pack Qty.	Product Code
Elliptical Clear									
175	NDL	210	MVR175/HOR	MVR175/HOR	15000	E40	10000	12	18104
250	NDL	210	MVR250/HOR	MVR250/HOR	23000	E40	15000	12	18101
400	NDL	292	MVR400/HOR	MVR400/HOR	40000	E40	20000	6	18096
400	NDL	295	MVR400/VBU/40	MVR400/VBU/40	40000	E40	20000	6	49860
400	NDL	292	MPR400/VBU/0/40 ⁻²	MPR400/VBU/40	38000	E40	20000	6	18709

⁻¹ Vertical orientation

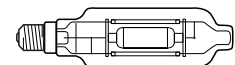
⁻² Suitable for open fixtures

Open Fixtures: For 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.

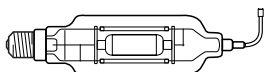
Sportlight® - Metal halide lamps for Sports and Floodlighting



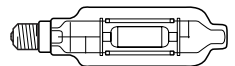
Watts	Colour	Length	Product Description	Previous Description	Initial Lumens	Cap	Rated Average Life hours	Pack Qty.	Product Code
Linear									
750	DL	256	SPL750/L/H/652/RX7SM	MBI750/L/H	67000	R7s	6000	1	30058
1000	DL	256	SPL1000/L/H/652/RX7SM	MBI1000/L/H	80000	R7s	6000	1	34523
1500	DL	256	SPL1500/L/H/652/RX7SM	MBI1500/L/H	120000	R7s	6000	1	30061
1600	DL	256	SPL1600/L/H/652/RX7SM	MBI1600/L/H	135000	R7s	6000	1	30063
2000	DL	311	SPL2000/L/H/652/spec	MBI2000/L/H	200000		6000	1	30064



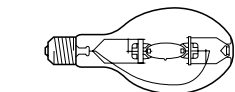
Watts	Colour	Length	Product Description	Previous Description	Initial Lumens	Cap	Rated Average Life hours	Pack Qty.	Product Code
Tubular Clear									
1000	DL	340	SPL1000/T/H/960/E40	MBID1000/T/H	80000	E40	8000	6	30056
2000	DL	430	SPL2000/T/H/960/E40	MBID2000/T	170000	E40	5000	1	30102



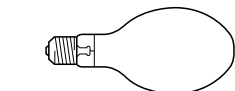
Watts	Colour	Length	Product Description	Previous Description	Initial Lumens	Cap	Rated Average Life hours	Pack Qty.	Product Code
Hot Restrike									
2000	DL	430	SPL2000/HR/T/H/960/E40	MBID2000/T/HR	170000	E40	5000	1	30104



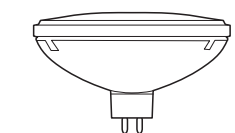
Watts	Colour	Length	Product Description	Previous Description	Initial Lumens	Cap	Rated Average Life hours	Pack Qty.	Product Code
Internal Ignitor									
2000	NDL	430	SPL2000/I/T/H/640/E40		170000	E40	5000	1	33148
2000	DL	430	SPL2000/I/T/H/960/E40	MBID2000/T/I	170000	E40	5000	1	30103



Watts	Colour	Length	Product Description	Previous Description	Initial Lumens	Cap	Rated Average Life hours	Pack Qty.	Product Code
Elliptical Clear									
1000	NDL	400	SPL1000/E/U/745/E40	MBI1000/U	92000	E40	12000	1	30054



Watts	Colour	Length	Product Description	Previous Description	Initial Lumens	Cap	Rated Average Life hours	Pack Qty.	Product Code
Elliptical Diffuse									
1000	NDL	400	SPL1000/D/U/740/E40	MBI1000/F/U	92000	E40	12000	1	30055
1000	DL	380	SPL1000/D/H/960/E40	MBID1000/F/H	68000	E40	8000	4	30057



Watts	Colour	Length	Product Description	Previous Description	Initial Lumens	Cap	Rated Average Life hours	Pack Qty.	Product Code
PAR 64									
1000	NDL	175	CSI/PAR64/G38	CSI1000/PAR64/G38	76000	G38	3500	1	29333
1000	NDL	175	CSI/PAR64/HR/G38	CSI1000/PAR64/HR/G38	76000	G38	3500	1	29336

Notes: (Please refer to technical catalogue 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)

*Low operating costs,
long useful life,
energy-efficient
performance*



Lucalox T

Lucalox E

- *High efficiency - up to 150 lumens per watt - converting more energy into light, cutting energy and operating costs.*
- *Outstanding life - up to 28,500 hours substantially reducing lamp maintenance and replacement costs.*
- *Lamps that start out bright and stay that way, offering high maintained lumens over life.*

Lucalox lamps offer an economical means of providing safety for both motorists and pedestrians.

Applications:

Ideal for lighting sports halls, warehouses, pedestrian areas, road lighting, industrial & commercial installations and plant cultivation.



GE's patented Amalgam Reservoir assures long life and high maintained light output.



Controlling voltage rise is the key to long life in high pressure sodium lamps.

GE's unique reservoir design achieves this control by ensuring only the precise amount of sodium/mercury amalgam vapor is delivered to the arc tube throughout lamp life.

The result is longer life, less lamp blackening and exceptional lumen maintenance.

Lucalox[®] High Pressure Sodium

Lucalox[®] Standard



The highly efficient, long-life lamp

- Ideal for streetlighting, commercial and industrial use
- Wide range of wattages and sizes
- Up to 28,500 hours life
- Highly efficient, producing 140 lumens per watt

Lucalox[®] HO



The extra high output and long-life lamp

- Extra light - up to 20% more lumens
- Long life of up to 28,500 hours
- Highly efficient, producing 150 lumens per watt

Lucalox[®] Classique



The colour performance lamp

- Improved quality colour reproduction extends applications to interiors and floodlighting
- Complements standard incandescent and HPS light sources
- Retrofits in standard high pressure sodium sockets eliminating need for different fixtures

Lucalox[®] Internal Ignitor

The efficient, long-life replacement of incandescent light fittings

- Simple - luminaires only need regular HPS ballast, simpler luminaire designs can be used
- Efficiency and long-life from a simple and versatile retrofit lamp
- Compact - enables use of small fixture lighting systems



Lucalox[®] TD (Double-ended)

Lucalox efficiency in an ultra compact size

- Compact size - small size fits ultra compact fixtures
- Excellent optimal control - delivers a concentrated beam of light exactly where needed
- High efficiency
- Long life



Lucalox[®] E-Z Lux[™]

Converts mercury sockets to highly efficient high pressure sodium lighting

- Direct replacement for mercury lamps - operates on mercury ballasts
- More efficient, higher lumens than mercury - 14% energy cost savings - 40%+ more light



Lucalox[®] Superlife

Extra arc tube provides light instantly after power interruption

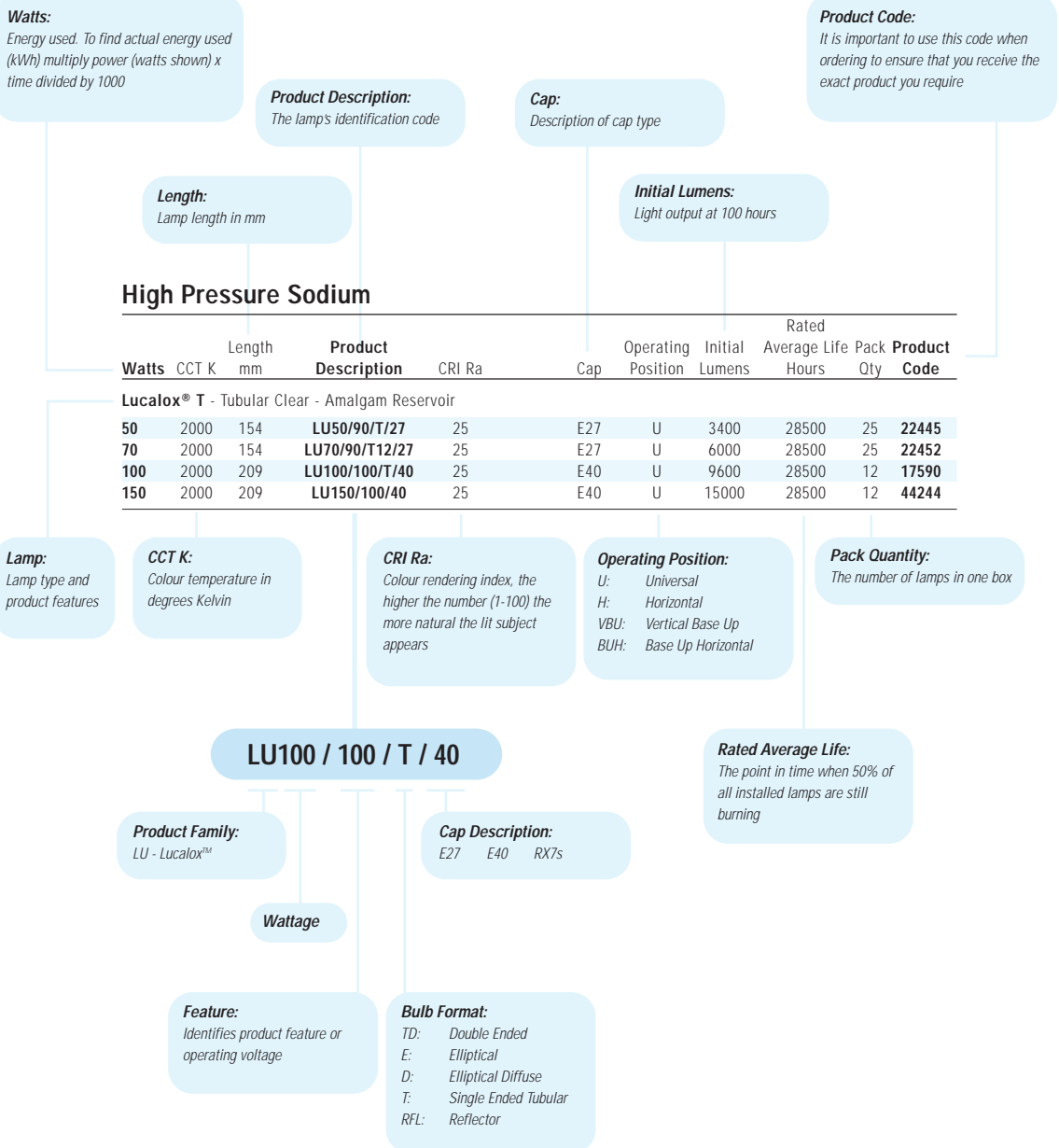
- "Superlife" arc tube provides light instantly after momentary power interruption, and will increase to full output in 1-2 minutes
- Longest life - dual arc tubes provide up to 55,000 hour rated life



Lucalox[®] High Pressure Sodium


High Pressure Sodium identification

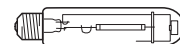
The following glossary of terms and descriptions can help you when checking high pressure sodium lamp specifications and explains how to use the order codes when ordering products. Within each product line, lamps are divided into families - within families, lamps are listed by wattage.




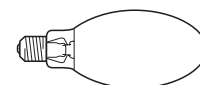
High Intensity Discharge


High Pressure Sodium

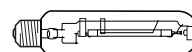
Watts	CCT K	Length mm	Product Description	CRI Ra	Cap	Operating Position	Initial Lumens	Rated		Pack Qty	Product Code
								Average Life Hours	Life Hours		
Lucalox® T - Tubular Clear - Amalgam Reservoir 											
50	2000	154	LU50/90/T/27	25	E27	U	3400	28500	25	25	22445
70	2000	154	LU70/90/T12/27	25	E27	U	6000	28500	25	25	22452
100	2000	209	LU100/100/T/40	25	E40	U	9600	28500	12	12	17590
150	2000	209	LU150/100/40	25	E40	U	15000	28500	12	12	44244
250	2000	257	LU250/T/40	25	E40	U	27500	28500	12	12	22453
400	2000	280	LU400/T/40	25	E40	U	50000	28500	12	12	11678
1000	2000	380	LU1000/110/T/40*4pk	25	E40	U	130000	24000	4	4	34832




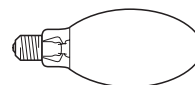
Lucalox® E - Elliptical Diffuse - Amalgam Reservoir 											
50	2000	160	LU50/90/D/27	25	E27	U	3300	28500	12	12	10794
70	2000	160	LU70/90/D/27	25	E27	U	5800	28500	12	12	10101
100	2000	186	LU100/100/D/40	25	E40	U	9200	28500	12	12	17589
150	2000	232	LU150/100/D/40	25	E40	U	14500	28500	12	12	44245
250	2000	232	LU250/D/40	25	E40	U	26000	28500	12	12	44052
400	2000	292	LU400/D/40	25	E40	U	47500	28500	6	6	44057
1000	2000	410	LU1000/110/D/40*	25	E40	U	120000	24000	1	1	30228



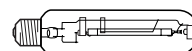
Lucalox® HO - (High Output), Tubular Clear - Amalgam Reservoir 											
50	2000	154	LU50/85/HO/T27	25	E27	U	4000	28500	25	25	35109
70	2000	154	LU70/90/HO/T27	25	E27	U	6500	28500	25	25	35112
100	2000	210	LU100/100/HO/T/40	25	E40	U	10000	28500	12	12	35113
150	2000	210	LU150/150/HO/T/40	25	E40	U	17500	28500	12	12	35114
250	2000	257	LU250/HO/T/40	25	E40	U	33000	28500	12	12	35120
400	2000	285	LU400/HO/T/40	25	E40	U	56500	28500	12	12	47963
600	2000	285	LU600/HO/T/40	25	E40	U	90000	28500	12	12	47962



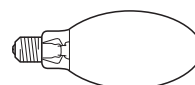
Lucalox® HO - (High Output), Elliptical Diffuse - Amalgam Reservoir 											
100	2000	186	LU100/100/HO/D/40	25	E40	U	9600	28500	12	12	35300
150	2000	227	LU150/100/HO/D/40	25	E40	U	16900	28500	12	12	35301
250	2000	186	LU250/HO/D/40	25	E40	U	31200	28500	12	12	35302
400	2000	282	LU400/HO/D/40	25	E40	U	53700	28500	6	6	35295




Lucalox® Classique - Tubular Clear 											
150	2200	210	LU150/CL-DL/T/40	60	E40	U	13000	14000	10	10	34929
250	2200	257	LU250/CL-DL/T/40	60	E40	U	23000	14000	10	10	44761
400	2200	285	LU400/CL-DL/T/40	60	E40	U	37000	14000	10	10	44759




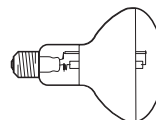
Lucalox® Classique - Elliptical Diffuse 											
150	2200	227	LU150/CL-DL/D/40	60	E40	U	12000	14000	10	10	34928
250	2200	227	LU250/CL-DL/D/40	60	E40	U	22000	14000	10	10	44762
400	2200	286	LU400/CL-DL/D/40	60	E40	U	36000	14000	10	10	44760



Lucalox® TD - Tubular Clear, Double Ended 											
250	2000	191	LU250/TD	25	RX7s	HOR±20°	23000	20000	10	10	30241
400	2000	256	LU400/TD	25	RX7s	HOR±20°	43000	20000	10	10	30244
1000	2000	334	LU1000/TD	25	RX7s	HOR±20°	137000	20000	10	10	30246



Lucalox® RFL - Reflector Amalgam Reservoir 											
70	2000	144	LU70/RFL	25	E27	U	4000	28500	10	10	30238








 External Ignitor  Internal Ignitor



High Intensity Discharge

High Pressure Sodium

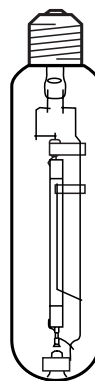
Watts	CCT °K	Length mm	Product Description	CRI Ra	Cap	Operating Position	Initial Lumens	Rated Average Life Hours	Pack Qty	Product Code
Lucalox® E-Z Lux™ - Diffuse Elliptical Amalgam Reservoir 										
110	2000	175	LUH110/D/27	25	E27	U	8800	16000	12	11683
215	2000	232	LUH215/D/EZ/40	25	E40	U	18000	12000	12	49941
Lucalox® I - Elliptical Clear, Amalgam Reservoir 										
50	2000	186	LU50/90/I/27	25	E27	U	3400	12000	12	11733
70	2000	186	LU70/90/I/27	25	E27	U	6000	12000	12	11735
Lucalox® I - Elliptical Diffuse, Amalgam Reservoir 										
50	2000	186	LU50/90/D/I/27	25	E27	U	3300	12000	12	11734
70	2000	186	LU70/90/D/I/27	25	E27	U	5800	12000	12	11736
Lucalox® Superlife - Tubular Clear 										
50	2000	156	LU50/90/SBY/T/27	25	E27	U	3400	40000	25	35585
70	2000	156	LU70/90/SBY/T/27	25	E27	U	6000	40000	25	35593
100	2000	211	LU100/100/SBY/T/40	25	E40	U	9600	40000	12	35592
150	2000	211	LU150/100/SBY/T/40	25	E40	U	15000	50000	12	35594
250	2000	260	LU250/SBY/T/40	25	E40	U	27500	55000	12	35586
400	2000	283	LU400/SBY/T/40	25	E40	U	50000	55000	12	35582
Lucalox® Superlife - Elliptical Diffuse 										
50	2000	156	LU50/90/SBY/D/27	25	E27	U	3300	40000	12	35583
70	2000	156	LU70/90/SBY/D/27	25	E27	U	5800	40000	12	35587
100	2000	186	LU100/100/SBY/D/40	25	E40	U	9200	40000	12	35588
150	2000	227	LU150/100/SBY/D/40	25	E40	U	14500	50000	12	35589
250	2000	227	LU250/SBY/D/40	25	E40	U	26000	55000	12	35590
400	2000	282	LU400/SBY/D/40	25	E40	U	47500	55000	6	35591

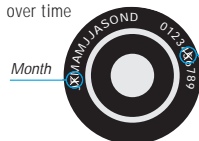
 External Ignitor

 Internal Ignitor

GE Lucalox Lamp

- **Nickel Alloy Cap**
Corrosion free, good electrical contact throughout life and moisture damage is eliminated
- **High maintained light output**
- **Shorter re-strike time**
Than either metal halide or mercury lamps
- **Starts and operates at temperatures as low as -40°C**
- **Provides a warm golden light**
- **Average rated life of up to 28,500Hrs**
Increased to 55,000 for Superlife versions. Offering lower replacement costs



- **Lamp Cap Identification**
Helps measure the lamp's performance over time

- **Clean Arc Tube**
- **Highest efficiency/lowest operating costs among the High Intensity Discharge (HID) product range with acceptable colour rendering**
- **Amalgam Reservoir**
Keeps more sodium for longer, slowing voltage rise and increasing lifespan

High quality colour from a versatile range of lamps



Kolorlux

- *Ideal for commercial, industrial and outdoor applications with a wide choice of lamp types and ratings.*
- *Good colour rendering.*
- *Modest installation and running costs.*

Good colour performance, long-term reliability and low operating costs mean mercury lamps are widely used in industrial lighting.

Applications:

for internal and external commercial and industrial applications, amenity and security lighting.

The Kolorlux range offers six different types of mercury lamp, each with their own particular qualities.

Kolorlux Standard

Traffic and industrial lamps.

Kolorlux Deluxe

Warm colour and enhanced light output for indoor and outdoor applications.

Kolorlux DX Long Life

Meeting IEC and ANSI specifications for applications demanding standard US spec.

Blended Light

An alternative to incandescent requiring no control gear and giving warm white light with good energy efficiency.

Mercury Reflector

Provides excellent downward light distribution with high resistance to degradation from dust and dirt.

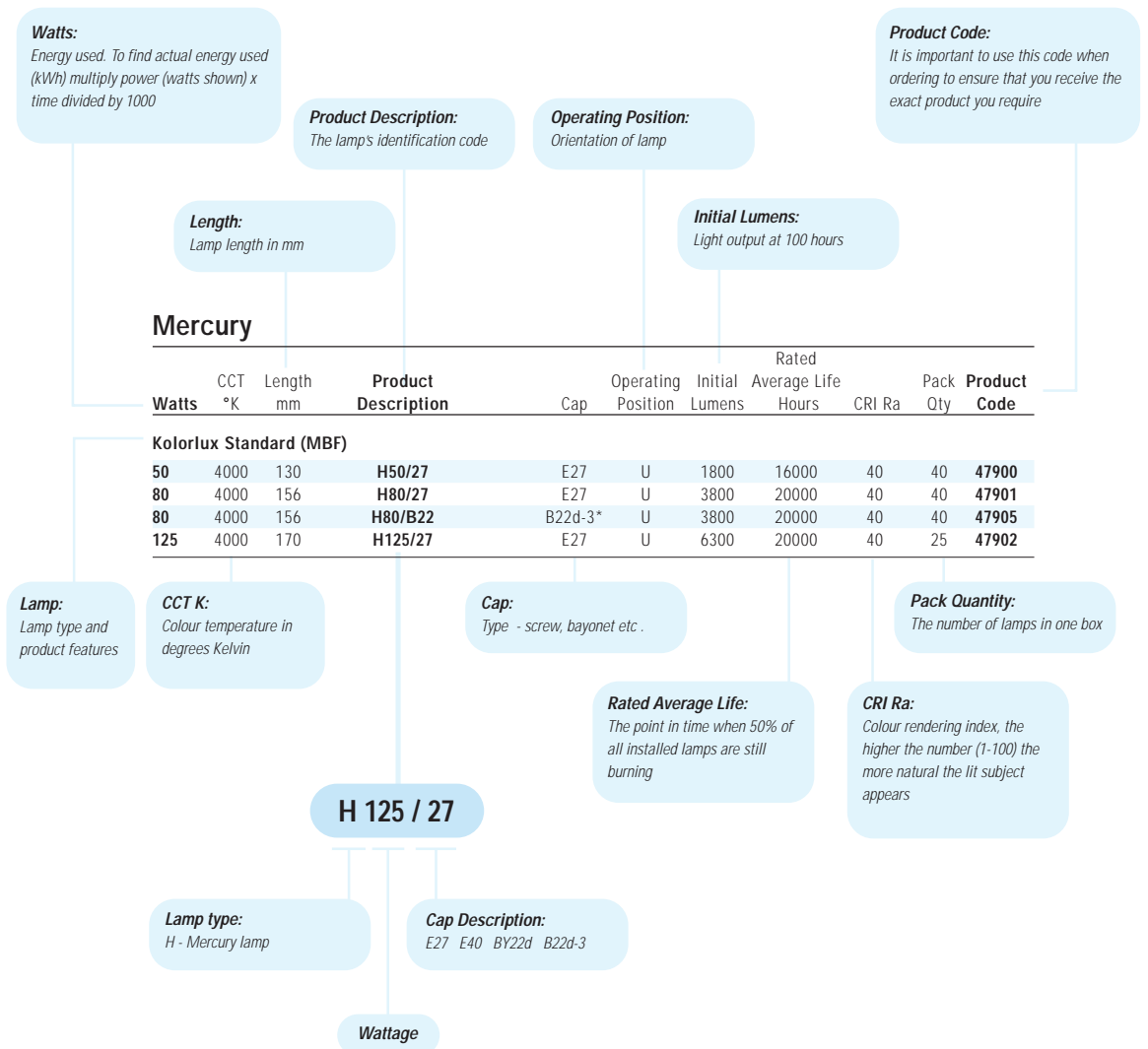
Blacklight (UV)

Emits long-wave UV creating fluorescence making it ideal for research and special effects.

Kolorlux Mercury

Mercury and Low Pressure Sodium identification

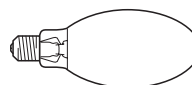
The following glossary of terms and descriptions can help you when checking mercury and low pressure sodium lamp specifications and explains how to use the order codes when ordering products. Within each product line, lamps are divided into families - within families, lamps are listed by wattage.



High Intensity Discharge

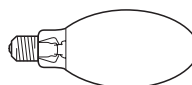
Mercury

Watts	CCT °K	Length mm	Product Description	Cap	Operating Position	Initial Lumens	Rated Average Life		Pack Qty	Product Code
							Hours	CRI Ra		
Kolorlux Standard (MBF)										
50	4000	130	H50/27	E27	U	1800	16000	40	40	47900
80	4000	156	H80/27	E27	U	3800	20000	40	40	47901
80	4000	156	H80/B22	B22d-3*	U	3800	20000	40	40	47905
125	4000	170	H125/27	E27	U	6300	20000	40	25	47902
125	4000	170	H125/B22	B22d-3*	U	6300	20000	40	25	47906
250	4000	227	H250/40	E40	U	13000	20000	40	12	47903
400	4000	292	H400/40	E40	U	22500	20000	40	12	47904
700	4000	330	H700/40	E40	U	40000	20000	40	6	30126
1000	4000	390	H1000/40	E40	U	58000	20000	40	4	30707



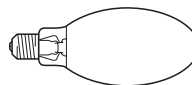
Kolorlux Deluxe

50	3500	130	H50NDX/27	E27	U	2000	16000	57	40	47907
80	3400	155	H80NDX/27	E27	U	4000	20000	57	40	47908
80	3400	155	H80NDX/B22	B22d-3*	U	4000	20000	57	40	47912
125	3350	170	H125NDX/27	E27	U	6500	20000	55	25	47909
125	3350	170	H125NDX/B22	B22d-3*	U	6500	20000	55	25	47913
250	3350	227	H250NDX/40	E40	U	14000	20000	55	12	47910
400	3400	292	H400NDX/40	E40	U	24000	20000	50	12	47911



Kolorlux DX Long Life

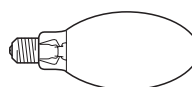
250	3900	213	HR250DX37/40	E40	U	12100	24000	50	12	32372
400	3900	290	HR400DX33/40	E40	U	22500	24000	50	6	32294
1000	3900	385	HR1000DX36/40	E40	U	63000	24000	50	6	33642



*B22d-3 is a 3 pin BC cap

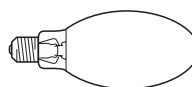
Blacklight (UV)

Watts	CCT °K	Length mm	Product Description	Cap	Operating Position	UV Emission	Amps	CRI Ra	Pack Qty	Product Code
UV Emission lamps										
125	-	178	HgV125	E27	U	2.75	1.15	-	25	47915
160	-	170	HMV160	E27	U	1.20	0.75	-	25	47916



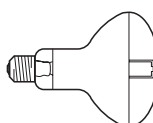
Blended Light

Watts	CCT °K	Length mm	Product Description	Cap	Operating Position	Initial Lumens	Rated Average Life		Pack Qty	Product Code
							Hours	CRI Ra		
MBTF										
160	3500	170	HMLI160/230-240V	E27	VER±30°	3100	10000	52	40	21072
160	3500	170	HMLI160/240-250V	E27	VER±30°	3100	10000	52	40	21073
250	3500	227	HMLI250/230-240V	E40	VER±30°	5600	10000	52	12	21074
250	3500	227	HMLI250/240-250V	E40	U	5600	10000	52	12	21075
500	3500	292	HMLI500/230-240V	E40	U	14000	10000	52	6	21076



Mercury Reflector

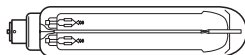
Watts	CCT °K	Length mm	Product Description	Cap	Operating Position	Initial Lumens	Rated Average Life		Pack Qty	Product Code
							Hours	CRI Ra		
MBFR										
250	3900	253	H250R	E40	U	11500	24000	50	6	30146
400	3900	293	H400R	E40	U	20500	24000	50	6	30147
700	3900		H700R						1	30150
1000	3900	370	H1000R	E40	U	52000	24000	50	1	30152



High Intensity Discharge

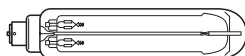
Low Pressure Sodium

Watts	CCT °K	Length mm	Product Description	Survival %	Cap	Operating Position	Initial Lumens	Rated		Product Code
								Average Life Hours	Pack Qty	
SOX - PLUS guaranteed to 12,000 hours										
35	1800	311	SOXPLUS35W	70	BY22d*	HOR±20°	4600	16000	16	36750
55	1800	425	SOXPLUS55W	70	BY22d*	HOR±20°	7650	16000	16	36754
90	1800	528	SOXPLUS90W	50	BY22d*	HOR±20°	12750	16000	9	36756
135	1800	775	SOXPLUS135W	50	BY22d*	HOR±20°	22000	16000	9	36759



SOX

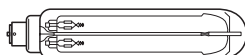
18	1800	216	SOX18	70	BY22d*	HOR±20°	1800	16000	16	21294
35	1800	311	SOX35	70	BY22d*	HOR±20°	4600	16000	16	21296
55	1800	425	SOX55	70	BY22d*	HOR±20°	7650	16000	16	21297
90	1800	528	SOX90	50	BY22d*	HOR±20°	12750	16000	9	21298
135	1800	775	SOX135	50	BY22d*	HOR±20°	22000	16000	9	21299



Note: to 80% survival 18, 35 & 55W, 12000 hours

SOX-E - Economy

26	1800	311	SOX26E	70	BY22d*	HOR±20°	4060	16000	16	30204
36	1800	425	SOX36E	70	BY22d*	HOR±20°	6400	16000	16	30205
66	1800	528	SOX66E	50	BY22d*	HOR±20°	10800	16000	9	30209
91	1800	775	SOX91E	50	BY22d*	HOR±20°	16800	16000	9	30211
131	1800	1120	SOX131E	50	BY22d*	HOR±20°	26000	16000	9	30212



Note: to 80% survival 26, 36W 12000 hours *BY22d is 2 pin BC cap

GE SOX-Plus Lamp - Driven by Six Sigma Quality

• Low Conductivity Mica Support

• Better Electrodes

Improved coating technique through Statistical Process Control

Superior conditioning through better activation of emitter material

Sodium resistant sleeving

• Improved Gas Filling

Better lamp starting due to Statistical Process Control of purity and pressure fill gas

High vacuum insulation in outer jacket

• Smooth Arc-Tube

No pitting of surface by features that may act as weak points

No indentations for sodium to evaporate over lamp life and reduce efficacy

Minimal discolouration of sodium resistant coating due to improved manufacturing process

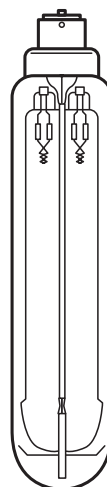
• Graduated Insulating Coating

Optimises lamp energy balance

• Reliable Metal Top Clip

Robust to vibration in poor weather conditions

Mica spacer for low heat conductivity from arc-tube



Energy-efficiency and reliability through life



SOX



- *GE's SOX lamps produce light at wavelengths close to the peak sensitivity of the human eye and so provide one of the most efficient types of artificial light.*
- *Particularly suitable where long operating hours are demanded such as lighting roads, tunnels and pathways, where SOX lamps' remarkably low-energy/high output characteristics make them a cost-effective choice.*

Low pressure sodium lamps are ultra energy efficient and produce a familiar, yellow light.

Applications:

roads, tunnels and walkways.

GE's SOX lamps offer outstanding performance and reliability throughout their rated life.

Outstanding energy-efficiency
producing up to 4060 lumens from just 26 watts.

Long-life
16,000 hours rated average life.

Long-term reliability
with lamp survival rates of up to 80% at 12,000 hours.

Long-term performance
offering 80% lumen maintenance at maximum rated life.

SOX Low Pressure Sodium

Brand cross-reference

Family	Description	Previous Description	Osram	Philips	Sylvania	
Arcstream*	ARC70/TD/730/RX7S	MQI/70/T6/30	HQI-TS 70 W/WDL	MHW-TD 70W RX7S	HSI-TD 70W/WDL3K	
	ARC70/TD/735/RX7S	MQI/70/T6/35	-	-	-	
	ARC70/TD/742/RX7S	MQI/70/T6/43	HQI-TS 70 W/NDL	MHN-TD 70W RX7S	HSI-TD 70W/NDL4K	
	ARC150/TD/730/RX7S	MQI/150/T7/30	HQI-TS 150 W/WDL	MHW-TD 150W RX7S	HSI-TD 150W/WDL3K	
	ARC150/TD/735/RX7S	MQI/150/T7/35	-	-	-	
	ARC150/TD/742/RX7S	MQI/150/T7/43	HQI-TS 150 W/NDL	MHN-TD 150W RX7S	HSI-TD 150W/NDL4K	
	ARC250/TD/830/FC2	MQI/250/T8/30	HQI-TS 250 W/WDL	-	HSI-TD 250W/WDL3K	
	ARC250/TD/840/FC2	MQI/250/T8/43	HQI-TS 250 W/NDL	MHN-TD 250W FC2	HSI-TD 250W/NDL4K	
	ARC150/T/U/730/G12	MBI150/T/30	HQI-T 150 W/WDL	-	HSI-T 150W/WDL3K	
	ARC150/T/U/740/G12	MBI150/T/40	HQI-T 150 W/NDL	-	-	
	ARC70/T/U/730/G12	MBI70/TX/30	HQI-T 70 W/WDL	-	HSI-T 70W/WDL3K	
	ARC70/T/U/740/G12	MBI70/TX/40	HQI-T 70 W/NDL	-	-	
	ARC100/E/U/732/E27	MXR100/U/27	HQI-E 100 W/WDL clear	-	-	
	ARC100/C/U/732/E27	MXR100/C/U/27	HQI-E 100 W/WDL	-	-	
	ARC250/E/H/645/E40	MBI250/H	-	-	-	
	ARC250/D/H/740/E40	MBI250/F/H	-	-	-	
	ARC250/D/H/960/E40	MBID250/F/H	-	-	-	
	ARC250/D/V/960/E40	MBID250/F/V	-	-	-	
	ARC250/T/H/742/E40	MBI250/T	-	-	-	
	ARC250/T/H/960/E40	MBID250/T/H	-	-	-	
	ARC250/T/V/960/E40	MBID250/T/V	-	-	-	
	ARC400/T/H/642/E40	MBI400/T	HQI T 400/N	-	-	
	ARC150/UVC/TD/730/RX7S	ARC150/UVC/TD/730/RX7S	HQI TS 150/WDL UVS	-	-	
	ARC150/UVC/TD/743/RX7S	ARC150/UVC/TD/743/RX7S	HQI TS 150/NDL UVS	-	-	
	ARC70/UVC/TD/730/RX7S	ARC70/UVC/TD/730/RX7S	HQI TS 70/WDL UVS	-	-	
	ARC70/UVC/TD/743/RX7S	ARC70/UVC/TD/743/RX7S	HQI TS 70/NDL UVS	-	-	
	ConstantColor™ CMH	CMH70/T/UVC/U/830/G12	CMH70/T/830/G12	HCI-T 70W/830	CDM-T 70W/830	-
		CMH70/TD/UVC/830/Rx7s	CMH70/TD/830/Rx7s	HCI-TS 70W/830	CDM-TD 70W/830	-
		CMH150/T/UVC/U/830/G12	CMH150/T/830/G12	HCI-T 150W/830	CDM-T 150W/830	-
		CMH150/TD/UVC/830/Rx7s-24	CMH150/TD/830/Rx7s-24	HCI-TS 150W/830	CDM-TD 150W/830	-
Kolorarc*	KRC400/E/H/645/E40	MBI400/H	-	-	-	
	KRC400/E/V/645/E40	MBI400/BU	-	-	-	
	KRC400/D/H/740/E40	MBI400/F/H	-	-	-	
	KRC400/D/H/960/E40	MBID400/F/H	-	-	-	
	KRC400/D/V/740/E40	MBI400/F/BU	-	-	-	
	KRC400/D/V/960/E40	MBID400/F/V	-	-	-	
	KRC400/T/H/960/E40	MBID400/T/H	-	-	-	
	KRC400/T/V/960/E40	MBID400/T/V	-	-	BRITELUX 400W/CL	
Multi-vapor*	MPR400/VBU/40	MPR400/VBU/40	-	-	MS 400W/3K/BU	
	MVR175/U/40	MVR175/U/40	-	-	-	
	MVR250/U/40	MVR250/U/40	-	-	-	
	MVR400/U/40	MVR400/U/40	-	-	-	
	MVR1000/U/40	MVR1000/U/40	-	-	-	
	MVR175/C/U/27	MVR175/C/U/27	-	-	-	
	MVR175/C/U/40	MVR175/C/U/40	-	-	-	
	MVR175/SP30/U/40	MVR175/SP30/U/40	-	-	-	
	MVR250/C/U/40	MVR250/C/U/40	-	-	-	
	MVR250/SP30/U/40	MVR250/SP30/U/40	-	-	-	
	MVR400/C/U/40	MVR400/C/U/40	-	-	-	
	MVR400/SP30/U/40	MVR400/SP30/U/40	-	-	-	
	MVR400/SP30/VBU/40	MVR400/SP30/VBU/40	-	-	-	
	MVR1000/C/U/40	MVR1000/C/U/40	-	-	-	
	MVR175/HOR	MVR175/HOR	-	-	-	
	MVR250/HOR	MVR250/HOR	-	-	-	
	MVR400/H/HOR	MVR400/HOR	-	-	-	
	MVR400/VBU/40	MVR400/VBU/40	-	-	-	
	MVR175/C/HOR	MVR175/C/HOR	-	-	-	
	MVR250/C/HOR	MVR250/C/HOR	-	-	MS 250W/CO/HOR	
	MVR400/C/HOR	MVR400/C/HOR	-	-	MS 400W/CO/HOR	
	MVR400/C/VBU/40	MVR400/C/VBU/40	-	-	MS 400W/CO/BU	
	MXR175/BU/40	MXR175/BU/40	-	-	-	
MXR175/C/BU/40	MXR175/C/BU/40	-	-	-		
Sportlight*	SPL1000/L/H/652/RX7SM	MBI1000/L/H	-	-	-	
	SPL1500/L/H/652/RX7SM	MBI1500/L/H	-	-	-	
	SPL1600/L/H/652/RX7SM	MBI1600/L/H	-	-	-	
	SPL2000/L/H/652/RX7SM	MBI2000/L/H	-	-	-	
	SPL750/L/H/652/RX7SM	MBI750/L/H	-	-	-	
	SPL1000/E/U/745/E40	MBI1000/U	-	-	-	
	SPL1000/D/H/960/E40	MBID1000/F/H	-	-	-	
	SPL1000/D/U/740/E40	MBI1000/F/U	-	-	-	
	SPL1000/T/H/960/E40	MBID1000/T/H	HQI T 1000/D	-	-	
	SPL2000/HR/T/H/960/E40	MBID2000/T/HR	HQI TS 2000/D	-	-	
	SPL2000/I/T/H/960/E40	MBID2000/T/I	HQI T 2000/D/I	-	-	
	SPL2000/T/H/960/E40	MBID2000/T	HQI T 2000/D	-	-	
	SPL1000/HR/PAR64/840/G38	CSI1000/PAR64/HR/G38	-	-	-	
	SPL1000/PAR64/840/G38	CSI1000/PAR64/G38	-	-	-	

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.

Family	Description	Osram	Philips	Sylvania
Lucalox® E	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® T	LU50/90/T/27	-	-	-
	LU70/90/T/27	-	-	-
	LU100/100/T/40	-	-	-
	LU150/100/T/40Q	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® HO Elliptical	LU100/100/HO/D/40	NAV E 100 SUPER	SON-PLUS 100	SHP-S 100
	LU150/150/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® HO Tubular	LU50/85/HO/T/27	NAV T 50 SUPER	SON-T-PLUS 50	SHP-TS 50
	LU70/90/HO/T/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
	LU150/150/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	NAV T 400 SUPER	SON-T-PLUS 400	SHP-TS 400
	LU600/HO/T/40	NAV T 600 SUPER	SON-T-PLUS 600	SHP-TS 600
Lucalox® Classique	LU150/CL/E	NAV E 150 DELUXE	SON COMFORT 150	SHP HCRI 150
	LU250/CL/E	NAV E 250 DELUXE	SON COMFORT 250	SHP HCRI 250
	LU400/CL/E	NAV E 400 DELUXE	SON COMFORT 400	SHP HCRI 400
	LU150/CL/T	NAV T 150 DELUXE	SON T COMFORT 150	SHP HCRI 150
	LU250/CL/T	NAV T 250 DELUXE	SON T COMFORT 250	SHP HCRI 250
	LU400/CL/T	NAV T 400 DELUXE	SON T COMFORT 400	SHP HCRI 400
Lucalox® I	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® E-Z Lux™	LUH110/D/27	NAV E 110W	-	-
	LUH215/D/EZ/40	NAV E 210W	SON-H 220W	SHX 210
Lucalox® TD	LU250/TD	NAV TS 250	-	-
	LU400/TD	NAV TS 400	-	-
	LU1000/TD	-	-	-
Lucalox® RFL	LU70/RFL	-	-	-
Lucalox® Superlife Tubular	LU50/70/SBY/T/27	-	-	SHP-T Twincar 50W
	LU70/90/SBY/T/27	-	-	SHP-T Twincar 70W
	LU100/100/SBY/T/40	-	-	SHP-T Twincar 100W
	LU150/100/SBY/T/40	-	-	SHP-T Twincar 150W
	LU250/SBY/T/40	-	-	SHP-T Twincar 250W
	LU400/SBY/T/40	-	-	SHP-T Twincar 400W
Lucalox® Superlife Elliptical	LU50/70/SBY/D/27	-	-	SHP Twincar 50W
	LU70/90/SBY/D/27	-	-	SHP Twincar 70W
	LU100/100/SBY/D/40	-	-	SHP Twincar 100W
	LU150/100/SBY/D/40	-	-	SHP Twincar 150W
	LU250/SBY/D/40	-	-	SHP Twincar 250W
	LU400/SBY/D/40	-	-	SHP Twincar 400W
Mercury Standard	H50/27	HQL 50	HPL-N 50W	HSL-BW 50W
	H80/27	HQL 80	HPL-N 80W	HSL-BW 80W
	H125/27	HQL 125	HPL-N 125W	HSL-BW 125W
	H250/40	HQL 250	HPL-N 250W	HSL-BW 250W
	H400/40	HQL 400	HPL-N 400W	HSL-BW 400W
	H700/40	HQL 700	HPL-N 700W	HSL-BW 700W
	H1000/40	HQL 1000	HPL-N 1000W	HSL-BW 1000W
	Mercury Deluxe	H50DX/27	HQL 50 DE LUXE	HPL COMFORT 50W
H80DX/27		HQL 80 DE LUXE	HPL COMFORT 80W	HSL-SC 80W
H125DX/27		HQL 125 DE LUXE	HPL COMFORT 125W	HSL-SC 125W
HR250DX/40		HQL 250 DE LUXE	HPL COMFORT 250W	HSL-SC 250W
HR400DX/40		HQL 400 DE LUXE	HPL COMFORT 400W	HSL-SC 400W

This cross-reference does not necessarily represent the full listing of lamps offered in alternative brands.

Discharge lamps

Reducing run-up times

When a discharge lamp is switched on, current first flows through the starting gas of the arc tube. The heat generated vaporises the mercury, sodium or halide filling until the operating conditions are achieved. This is known as the run-up. The run-up period can take several minutes before the lamp stabilises and produces the correct amount of light and colour. The table shows the typical times for both run-up and re-strike. Run-up times are the time it takes for the lamp to reach 90% of normal light output. Re-strike time is based upon lamps that have fully

run-up and then receive a momentary break in the supply voltage.

Both run-up times and re-strike times will vary according to location, the type of light fitting used and the ambient temperature.

Most discharge lamps other than mercury and multi-vapor lamps are started by a high voltage pulse supplied by a separate ignitor which is turned off once the lamp has started. External starting simplifies lamp construction and is very reliable.

Lamp	Rating	Rating waits Run-up time minutes	Re-strike time minutes
Arcstream			
Single Ended	70	more than 2	2
	150	1	2
Double Ended	70	3	10
	150	3	10
	250	4	10
Elliptical	100	3	5 - 10
	250	2	less than 7
Tubular	250	less than 2	less than 7
	400	less than 2.5	less than 7
Kolorarc			
Elliptical	400	less than 4	less than 7
Tubular	400	4	less than 7
Multi-Vapor			
	175	3	10 - 15
	250	3	10 - 15
	400	3	10 - 15
	1000	3	10 - 15
Sportlight			
Elliptical	1000	2	less than 7
Linear	750	2	12 Note 1
	1000	2	15 - 20 Note 1
	1500	2	15 - 20 Note 1
	2000	2	15 - 20
Tubular	1000	2	less than 7
	2000	4	7 Note 3
PAR	1000	1	10 Notes 2 & 3

Notes:

- 1 1-9 minutes if lamp is not re-energised within 3 minutes
- 2 In Floodlight
- 3 Hot Re-strike version also available

Lamp	Rating	Rating waits Run-up time minutes	Re-strike time minutes
Lucalox			
	50	3	less than 1
	70	3	less than 1
	100	3	less than 1
	125	3	less than 1
	150	3	less than 1
	250	3	less than 1
	400	3	less than 1
	1000	3	less than 1
Lucalox HO			
	50	2.5	1
	70	2.5	1
	100	2	1
	150	2	1
	250	2.5	1
	400	2.5	1
Lucalox Classique			
	150	4	1
	250	4	1
	400	4	1
Kolorlux			
	50	5	4
	80	3	4
	125	3	4
	250	4	4
	400	4	4
	700	3	6
	1000	2	7
SOX/SOX PLUS			
	18*	12	Instant
	35	9	Instant
	55	9	Instant
	90	9	10
	135	8	10
	180*	8	10
SOX E			
	26	9	Instant
	36	9	Instant
	66	9	10
	91	9	10
	131	9	10

*Not available as SOX PLUS

Calculating the life of lamps

All life ratings for GE high intensity discharge lamps are expressed in terms of 'Rated Average Life Hours'. This means the number of burning hours until 50% of a given installation of lamps can be expected to have burned out or to have ceased operating within published specifications. These ratings are based on lamps using approved control gear and burning at least ten hours per lamp start-up. Lamps burning less than ten hours per start will have a reduced Rated Average Life (typically 25% reduction for each burning cycle reduction of 50%).

Lamp quality standards

GE Lighting discharge lamps comply with the following standards:

IEC 188 High Pressure Mercury Vapour Lamps
IEC 192 Low Pressure Sodium Vapour Lamps
IEC 662 High Pressure Sodium Vapour Lamps
IEC 1167 Metal Halide Lamps

Operating temperatures

GE Lighting discharge lamps will start at temperatures down to -20°C (-40°C for Lucalox and -30°C for Compact Metal Halide).

Supply voltages

All lamps, unless noted to the contrary, are suitable for European and UK supplies using suitable control gear. Lamps will start and operate with a 10% reduction in rated supply voltage provided the correct control gear is used. However, in order to maximise lamp survival, lumen maintenance and colour uniformity, it is recommended that the supply voltage and ballast design voltage should be within $\pm 3\%$.

Switching lamps on and off

Continuous operation of mercury and metal halide lamps may increase the risk of lamp failure and a switch-off should be introduced at least every 24 hours.

Fuses

For recommended fuse and MCB ratings for discharge lamps please refer to the publication 'Fuse Ratings for Discharge Lamps' available from your local GE Lighting Sales Office.

Further information

The GE Lighting Technical Catalogue in English provides more detailed information on the products listed. The local GE Lighting Sales office will be pleased to provide you with a copy of this catalogue at your request.

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We hope that this Spectrum catalogue has helped you to identify the right lamps to meet your particular lighting needs. We have made every effort to make it easy to use, to include accurate, up-dated product data and to provide useful information about lamp technologies

and lighting applications. We take pride in our reputation for quality customer service and if there is any further information you need, please don't hesitate to contact your nearest GE Lighting sales office.

GE - We bring good things to life

*GE Lighting
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