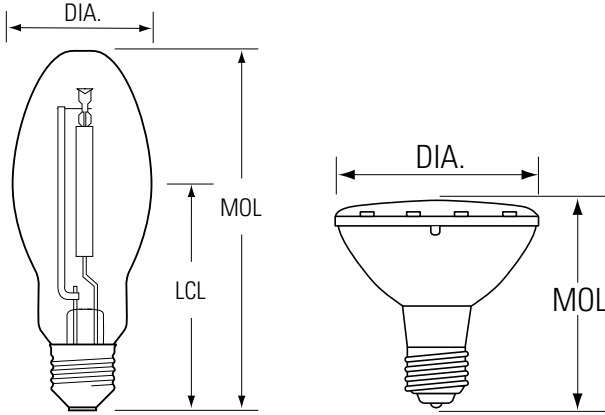




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## BULB IDENTIFICATION



DIA: Diameter of bulb at widest point.

MOL: Maximum Overall Length including base or pins.

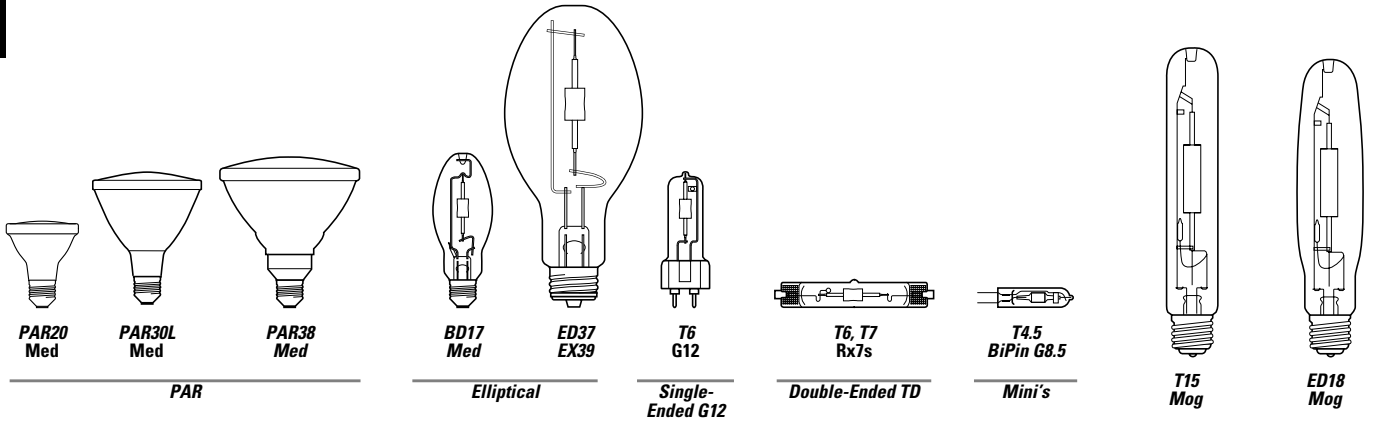
LCL: Distance between the center of the arc tube and the Light Center Length reference plane.

Note: Lamp drawings are not drawn to scale.

Be sure to check size and dimension information when identifying each lamp.

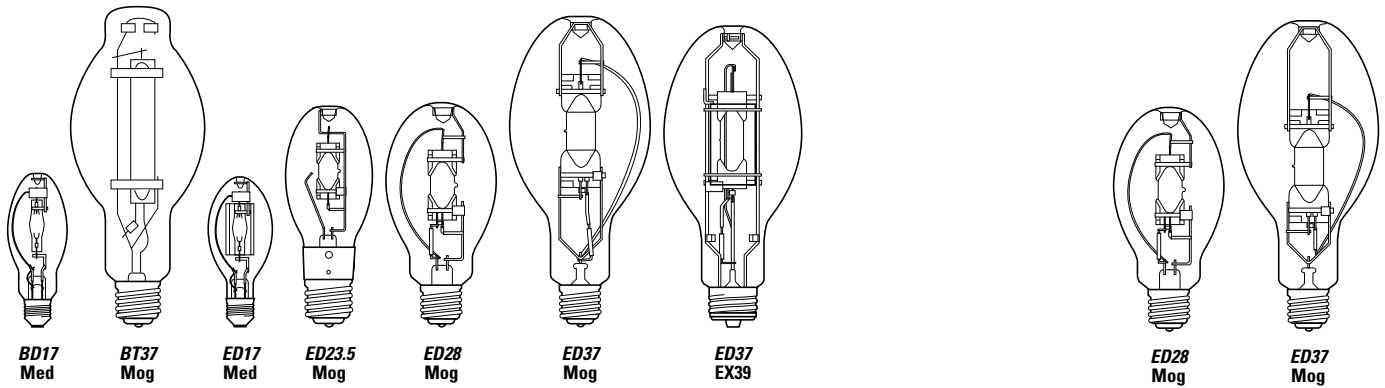
To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

## LAMP LOCATOR



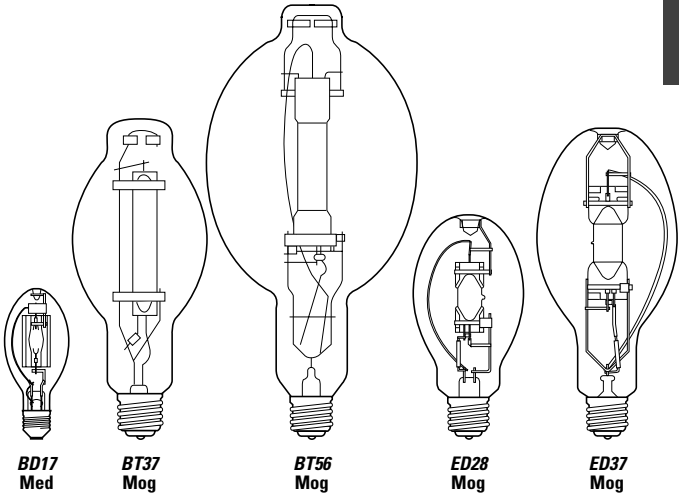
**ConstantColor® CMH® Ceramic Metal Halide**

**CMH® Chromafit™ Ceramic Metal Halide (HPS Retrofit Lamps)**



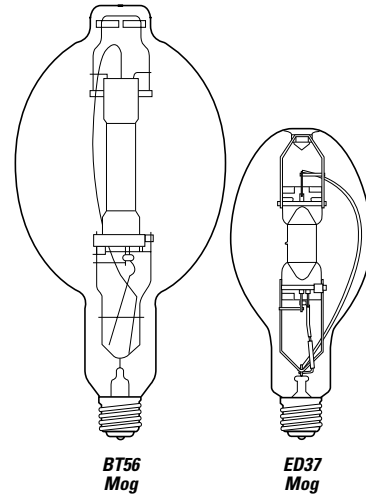
**PulseArc® Multi-Vapor® Metal Halide Lamps**

**Chromafit™ Multi-Vapor® Metal Halide Lamps (HPS Retrofit Lamps)**



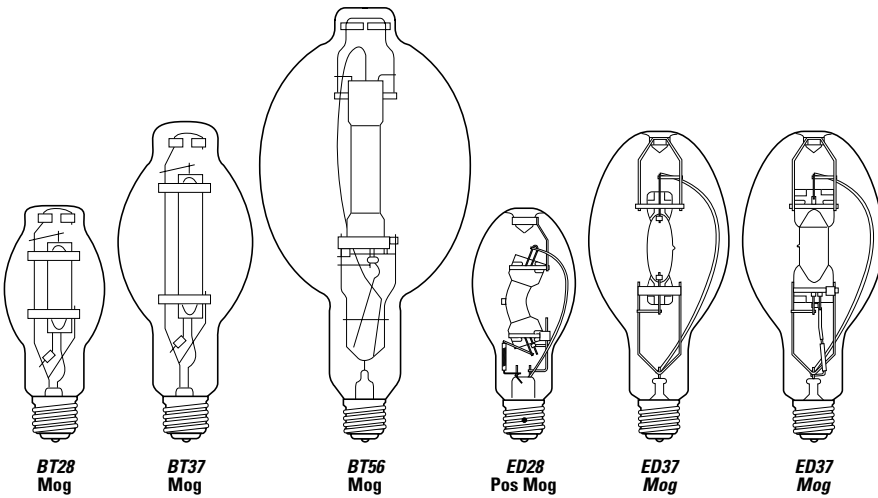
**BD17 Med**    **BT37 Mog**    **BT56 Mog**    **ED28 Mog**    **ED37 Mog**

**Multi-Vapor® Metal Halide Lamps**



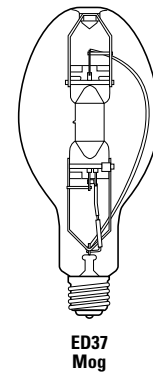
**BT56 Mog**    **ED37 Mog**

**I-Line Multi-Vapor® Metal Halide Lamps (Mercury Retrofit Lamps)**

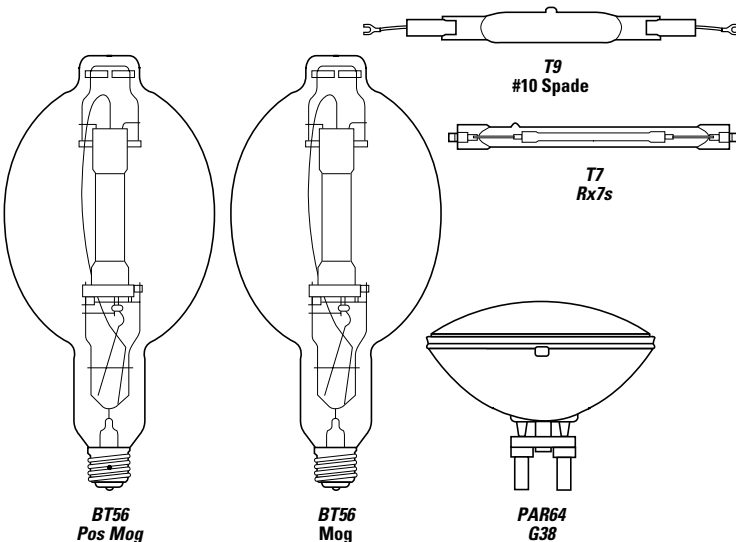


**BT28 Mog**    **BT37 Mog**    **BT56 Mog**    **ED28 Pos Mog**    **ED37 Mog**    **ED37 Mog**

**High Output and XHO Multi-Vapor® Metal Halide Lamps**

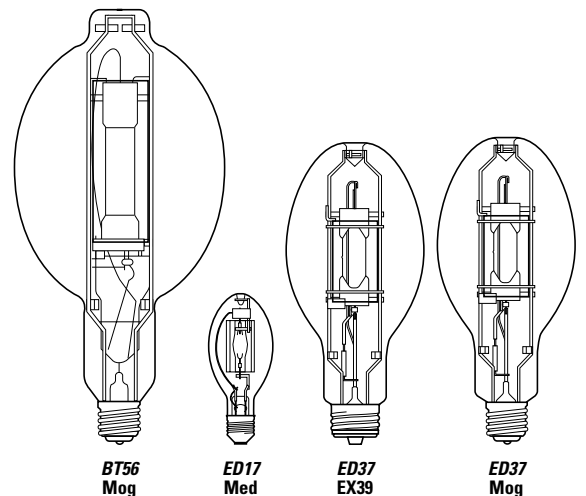


**Saf-T-Gard® Self-Extinguishing Multi-Vapor® Lamps**



**BT56 Pos Mog**    **BT56 Mog**    **PAR64 G38**

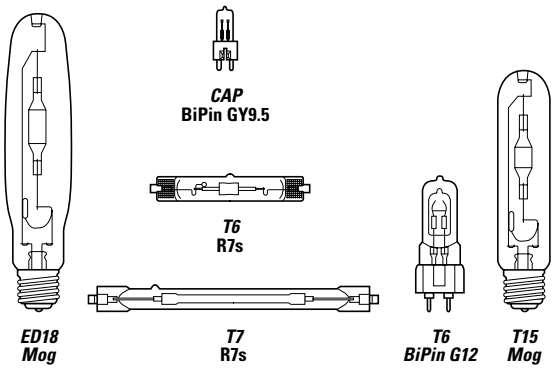
**Sportsighting**



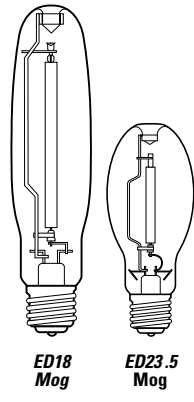
**BT56 Mog**    **ED17 Med**    **ED37 EX39**    **ED37 Mog**

**Protected Multi-Vapor® Metal Halide Lamps**

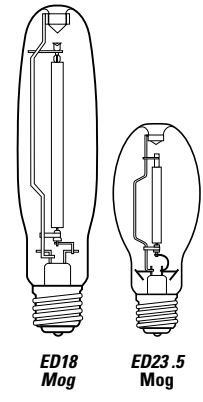
# High Intensity Discharge Lamps



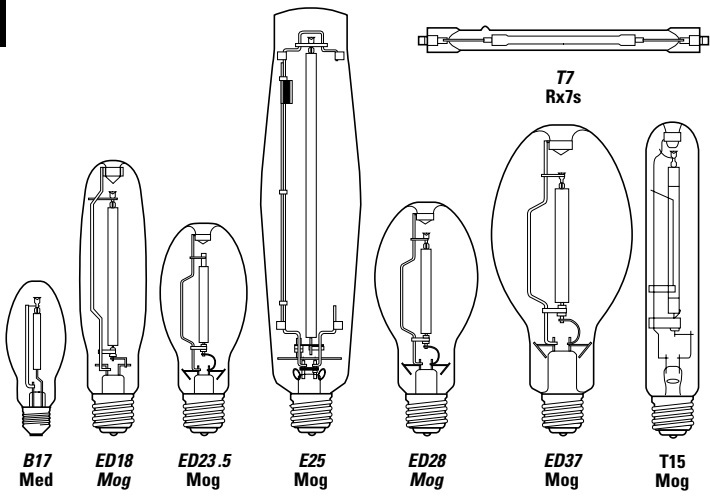
**Arcstream® Metal Halide Lamps**



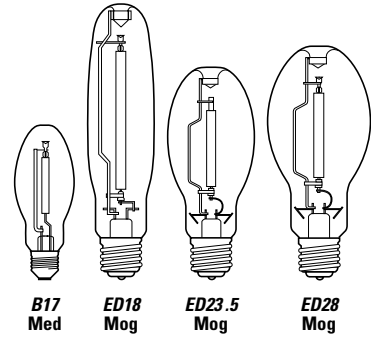
**Ecolux® NC Non-Cycling High Pressure Sodium Lamps (TCLP Compliant)**



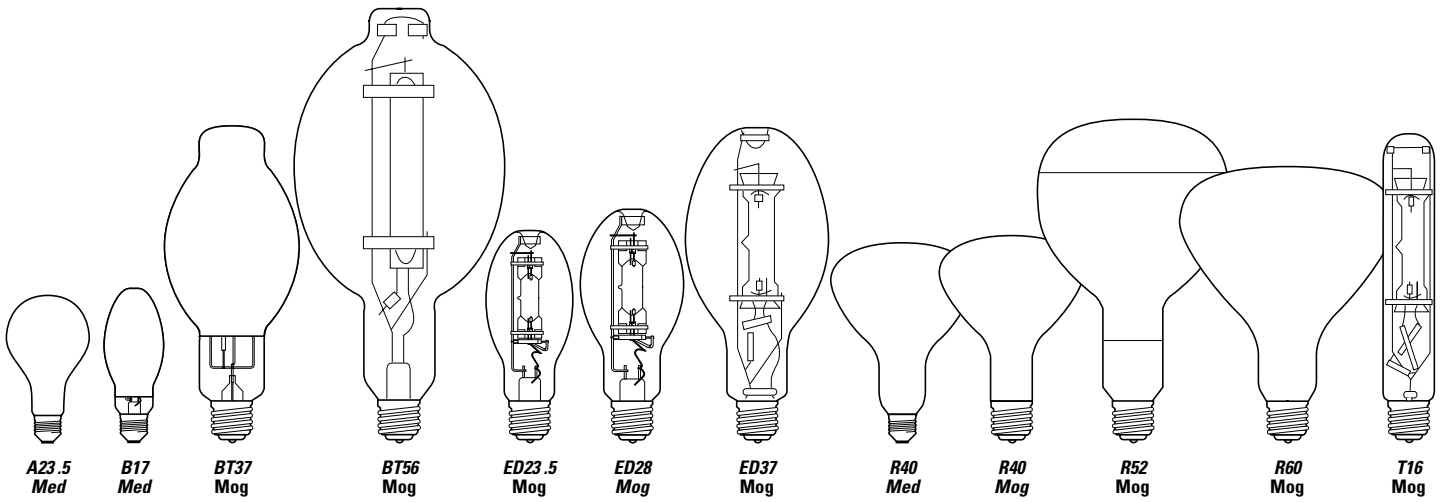
**Ecolux® High Pressure Sodium Lamps (TCLP Compliant)**



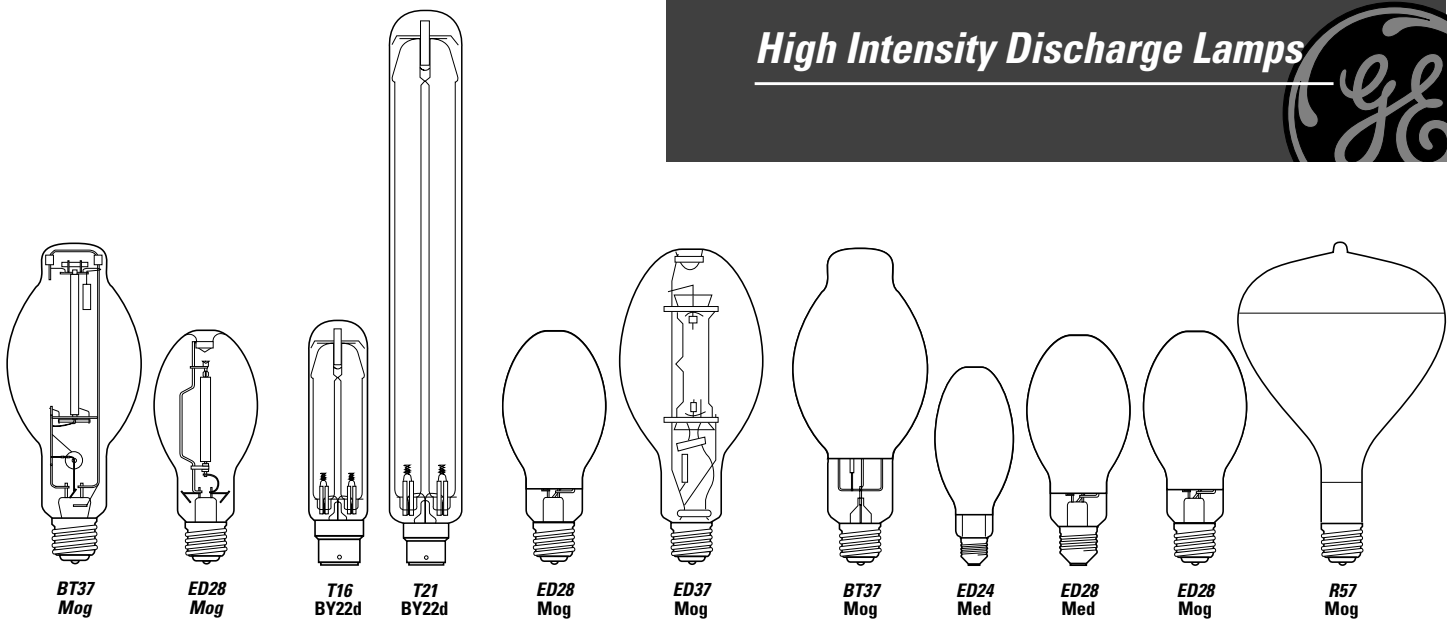
**Lucalox® High Pressure Sodium Lamps**



**Deluxe Lucalox® High Pressure Sodium Lamps**



**Mercury Lamps**



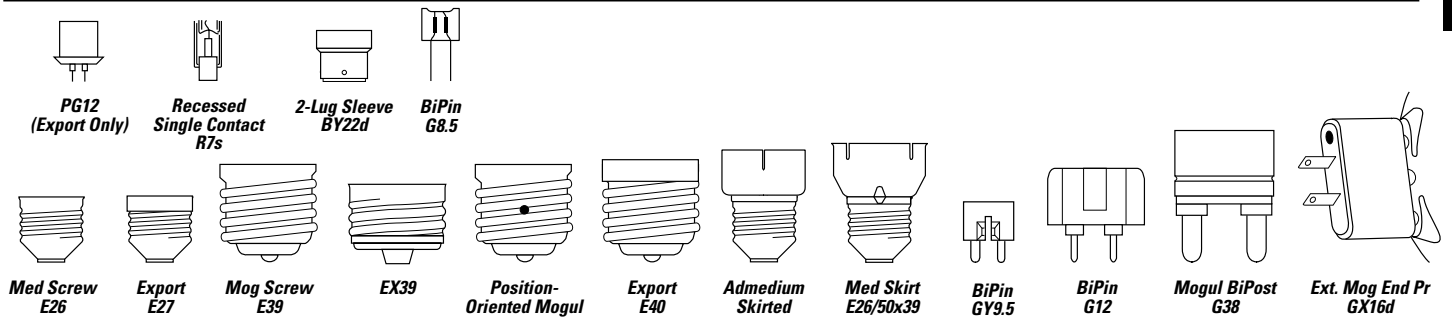
**E-Z Lux® High Pressure Sodium Lamps (Mercury Retrofit)**

**SOX Low Pressure Sodium Lamps**

**Saf-T-Gard® Mercury Lamps**

**E-Z Merc® Self-Ballasted Lamps (Incandescent Retrofit)**

## BASE IDENTIFICATION



## INTRODUCTION

GE HID lamps provide the following benefits:

**High Efficacy/Low Operating Cost.**

HID is generally the most efficient light source. Better efficiency almost always means lower operating cost.

**Long Life.**

Most HID lamps have life ratings that are better than incandescent lamps and similar to fluorescent lamps.

**Compact Size.**

An HID lamp produces high light output from a relatively compact source. Like incandescent, it is a "point" light source, which allows for good optical control.

The chart below shows how HID lamps compare to incandescent, halogen, and fluorescent in terms of efficiency and rated average life. Efficiency is measured in lumens per watt (LPW). Rated average life for most lamp types is the number of burning hours when 50% of the tested samples have failed and 50% are still operational. For both HID and fluorescent, lamp life depends on the number of hours per start.

The combination of high efficiency and long life makes HID an ideal light source for many commercial and industrial applications.

### SUGGESTED COLOR APPLICATIONS FOR HID LAMPS

**CMH®:** Stores, people places, display, accent.

**MVR:** Stores, public spaces, industrial, gymnasiums, floodlighting signs and buildings, parking areas, sports.

**MVR/C:** Same as MVR – warmer color – diffuse coating reduces glare.

### Typical Lamp Characteristics

Lamp Type	Typical LPW	Rated Avg. Life (in hours)
Incandescent	5 - 22	750 - 2000
Halogen	12 - 36	2000 - 6000
Compact Fluorescent	27 - 80	9000 - 20,000
Fluorescent	75 - 100	12,000 - 24,000 +
Mercury	50 - 60	12,000 - 24,000 +
ConstantColor® CMH®	80 - 95	7,500 - 20,000
Multi-Vapor® Metal Halide	80 - 115	10,000 - 20,000
Lucalox® High Pressure Sodium	90 - 140	10,000 - 40,000

**MVR/SP30:** Same as MVR – warmer than MVR or MVR/C – matches SP30 fluorescent.

**MXR:** Warm color (3200K) – good match for halogen.

**LU:** Street lighting, parking areas, industrial, floodlighting, security, CCTV.

**LU/DX:** Floodlighting, parking areas, indoor/outdoor pedestrian malls, industrial, security, roadway.

**Deluxe (DX) Mercury:** Stores, public spaces – Metal Halide lamps however, are preferred.

**Clear Mercury:** Landscape lighting, specialized floodlighting such as green copper roofs.



## PRODUCT INFORMATION

### GE CONSTANTCOLOR® CMH® CERAMIC METAL HALIDE LAMPS (pgs 3-9 to 3-10)

- Color uniformity lamp-to-lamp and over lamp life
- Excellent color rendering (80+ CRI, 90+ CRI for SPXX versions)
- Delivers more light than standard metal halide (10%–20% more than standard metal halide)
- Lamp operates at high efficacy — up to 95 lumens per watt
- Many are universal burn — may be operated in any position
- Easy retrofit since lamp operates on standard metal halide ballasts
- Perfect for retail and commercial display lighting, accent and floodlighting, lobby and foyer lighting. Ideal for “people places.”

### GE CMH® CHROMAFIT™ CERAMIC METAL HALIDE LAMPS (pg 3-10)

- Convert High Pressure Sodium sockets to crisp, white ceramic metal halide light (80+ CRI)
- Operate on standard HPS ballasts and auxiliary equipment
- Universal burn – may be operated in any position
- Uses: Area lighting, industrial and “people places”

### GE PULSEARC® MEDIUM BASED METAL HALIDE LAMPS (/MED MODELS) (pgs 3-10 to 3-12)

- Low wattage metal halide lamps (formerly Halarc®) are now part of the PulseArc® family
- Compact source
- Sparkling white light (3000-4000K) and very good color rendition (70-75 CRI)
- High efficacy – more than 3 times the lumens per watt of incandescent
- Long life – up to 15 times longer than incandescent systems and up to 7 times longer than most PAR and R systems, saving maintenance and labor costs
- Superior optical control
- Uses: Display lighting, downlighting, floodlighting, corridors, lobbies, walkways; retail, office, commercial

### GE PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS (/PA MODELS) (pgs 3-11 to 3-12)

- Designed for operation only on approved ballasts with metal halide pulse ignitors
- More light – 400W lamps provide highest initial and highest maintained lumens versus other standard universal or vertical base-up lamp options
- 50% longer life – 400W lamps provide 30,000 hours life when burned on 120 hour on/1 hour off cycle (approximately continuous)
- Faster hot restrike – less than 4 minutes versus 10-15 minutes for typical metal halide lamps

### GE MULTI-VAPOR® METAL HALIDE LAMPS (pgs 3-12 to 3-13)

- Sparkling white light (3000-4000K) and very good color rendition (65-75 CRI)
- Warm, rich 3000K color of SP30 blends well with incandescent, halogen and triphosphor fluorescent lamps for interior retail applications
- High efficacy – more efficient than incandescent, mercury and most fluorescent sources
- Long life – 10,000-20,000 hours for most types
- Full line, 150-1000 watts, to meet most application needs
- Uses: Downlighting, floodlighting, corridors, lobbies, walkways; retail, commercial, industrial

### GE HIGH OUTPUT MULTI-VAPOR® LAMPS (pgs 3-13 to 3-14)

- More light – optimized for higher light output in horizontal, vertical base-up and base-down burn applications
  - Horizontal burn lamps provide up to 25% more light than standard universal burn equivalents
  - 400W vertical burn lamps provide up to 22% more light than standard universal burn equivalents; the highest lumen lamps available for operation on standard M59 ballasts
- Longer life – horizontal burn lamps last up to 67% longer than universal burn lamp equivalents, significantly reducing replacement lamp and maintenance costs

### GE STAYBRIGHT® (/STB) LAMPS (pg 3-13)

- Brighter longer – has 32% higher mean lumens while running on standard metal halide ballasts
- Uses: Any application where fixed-orientation lamps can be used. Gas stations, sports lighting, billboards, retail, office, roadway, parking garages, floodlights, sign lighting.

### GE PROTECTED HIGH OUTPUT MULTI-VAPOR® LAMPS (/O) (pgs 3-14 to 3-15)

- Protective quartz jacket surrounds the arc tube
- The /O suffix and/or the “MPR” prefix in the Lamp Description indicates lamps are suitable for open fixture applications

### GE CHROMAFIT™ MULTI-VAPOR® LAMPS (/R) (pg 3-15)

- Convert high pressure sodium sockets to crisp white metal halide light (65-70 CRI)
- Operate on standard HPS ballasts and auxiliary equipment
- Uses: Area lighting, industrial and “people places”

### GE I-LINE MULTI-VAPOR® LAMPS (pgs 3-15 to 3-16)

- Convert mercury sockets to crisp, white metal halide light
- More light, better color, energy cost savings for mercury users
- 40%-100% more light than existing mercury lamps
- Operate on standard CW and CWA mercury ballasts and auxiliary equipment



## PRODUCT INFORMATION (CONTINUED)

### GE SAF-T-GARD® MULTI-VAPOR LAMPS (MVT) (pg 3-16)

- Special self-extinguishing feature prevents exposure to UV in case outer bulb is punctured or broken; lamp turns off within 15 minutes
- Meets requirements of Federal Standard 21CFR1040.30
- Saf-T-Gard® I-Line lamps convert mercury sockets to crisp, white metal halide light
- Saf-T-Gard® I-Line lamps operate on standard mercury ballasts and auxiliary equipment
- Uses: Industrial, commercial, gymnasiums, sports complexes, especially where open fixtures are used and risk of outer bulb breakage is possible

### GE ARCSTREAM® METAL HALIDE LAMPS (pg 3-16)

- Compact size, white light, excellent color
- Precise optical control delivers a concentrated beam of light right where it's needed
- Variety of color temperatures (3,000K - 6,000K)
- PAR64: ideal for long-range projection and sports lighting applications
- Uses: Ideal for retail and commercial display lighting, floodlighting, accent/highlighting

### GE LUCALOX® HIGH PRESSURE SODIUM LAMPS (pgs 3-16 to 3-17)

- Very high efficacy/low operating cost
- Superior lumen maintenance – over 90% @ 50% of life
- Very long life – 24,000+ hours
- Universal burn – can be operated in any position without affecting performance
- Warm color
- For open or enclosed fixtures
- Uses: Industrial, roadway, security, floodlighting

### GE DOUBLE-ENDED LUCALOX® LAMPS (/TD) (pg 3-17)

- Compact tubular design fits compact fixtures for excellent optical control
- High efficacy, lumen maintenance and long life of standard Lucalox® HPS

### GE STANDBY LONGLIFE LUCALOX® LAMPS (/SBY) (pgs 3-17 to 3-18)

- Extra arc tube provides light instantly after momentary power interruption, and will increase to 80% light output in 1-2 minutes
- Dual arc tubes provide 40,000 hour rated life
- Operates on standard HPS ballasts and auxiliary equipment
- Uses: Industrial, roadway, security, and hard-to-reach sockets

### GE ECOLUX® NC "NON-CYCLING" HIGH PRESSURE SODIUM LAMPS (/ECO/NC) (pg 3-18)

- Low mercury. Passes TCLP, which can lower disposal costs.
- Non-cycling feature makes locating and replacing end-of-life lamps quick and easy
- Lead-free base
- High efficacy/low operating cost

- 6%-11% higher initial lumens than standard HPS in 100W and 400W versions
- Long life - 24,000 hours
- Open or enclosed fixtures
- Uses: Industrial, roadway, security

### GE ECOLUX® HIGH PRESSURE SODIUM LAMPS (/ECO) (pgs 3-18 to 3-19)

- Lead-free base. Passes TCLP, which can lower disposal costs.

### GE DELUXE LUCALOX® HIGH PRESSURE SODIUM LAMPS (pg 3-19)

- High efficacy, lumen maintenance and long life of standard Lucalox® HPS
- High color rendering (65-70CRI), much better than standard HPS
- Blends well with incandescent and standard HPS sources
- Operates on standard HPS ballasts and auxiliary equipment
- Uses: Storage rooms, industrial facilities, offices, gymnasiums, malls, parks, building floodlighting

### GE E-Z LUX® HIGH PRESSURE SODIUM LAMPS (pg 3-19)

- Direct replacement for mercury lamps on mercury ballasts
- More efficient, 57-114% more lumens and 10-14% fewer watts than mercury lamps they replace
- Uses: General lighting, roadway
- See operating notes for further information

### GE SOX LOW PRESSURE SODIUM LAMPS (pg 3-19)

- Highest luminous efficacy for general, not for color-critical lighting
- Monochromatic, yellow color (589nm)

### GE MERCURY LAMPS (pgs 3-19 to 3-20)

- Long life and good efficacy
- Phosphor coated Deluxe lamps provide good color rendering(50CRI)
- Uses: Industrial, roadway, landscapes, residential and commercial security, parking lots

### GE SAF-T-GARD® MERCURY LAMPS (pg 3-20)

- Special self-extinguishing feature prevents exposure to harmful UV in case outer bulb is punctured or broken; lamp turns off within 15 minutes
- Meets requirements of Federal Standard 21 CFR 1040.30
- See operating notes for further information

### GE E-Z MERC® SELF-BALLASTED MERCURY LAMPS (pgs 3-20 to 3-21)

- Retrofit incandescent sockets to longer-life mercury lamps without additional mercury ballasts or auxiliary equipment

### GE EXPORT BASE LAMPS (pg 3-21 and 3-23)

- Export-only lamps are not intended for use in North America due to potential shock hazard. The lamps are identified by "/27" or "/40" at the end of the lamp description, and comply with electrical characteristics defined by IEC standards.
- Bulb shapes are generally similar to U.S. lamp types. Refer to drawings on pages 3-2 to 3-5.

# High Intensity Discharge Lamps



## HID BRAND NAME CROSS-REFERENCE

GE	OSRAM/SYLVANIA	PHILIPS
Arcstream® MQI	BRITE-LINE™, HQI®	MHN-TD
ChromaFit™ Multi-Vapor®	—	—
ConstantColor® CMH® Ceramic Metal Halide	Powerball MCP	MasterColor™ CDM
Deluxe Lucalox®	—	Ceramalux™ Comfort
E-Z Lux®	Unalux®	Ceramalux™ Retrolux
E-Z Merc®	—	Self Ballasted Mercury
Ecolux®	Lumalux ECO®	Ceramalux Alto®
Ecolux® NC	Lumalux Plus™/ECO®	Ceramalux Alto® Plus
High Output Multi-Vapor®	Super Metalarc®	Metal Halide
Horizontal Multi-Vapor®	Super Metalarc®	—
I-Line Multi-Vapor®	—	—
Lucalox®	Lumalux®	Ceramalux™
Multi-Vapor®	Metalarc®	Metal Halide
Protected High Output Multi-Vapor®	Metalarc® Pro-Tech™	—
PulseArc®	Super Metalarc® Pulse Start	Pulse Start
Saf-T-Gard® Mercury	Mercury Safeline®	Safety Lifeguard Mercury
Saf-T-Gard® Multi-Vapor®	Metalarc® Safeline®	Safety Lifeguard Metal Halide
SOX Low Pressure Sodium	SOX Low Pressure Sodium	SOX Low Pressure Sodium
Standby Longlife Lucalox®	Lumalux® Standby	Instant Restrike Ceramalux™
StayBright®	—	—
Watt-Miser® Multi-Vapor®	—	—

**ATTENTION:** This brand-name cross-reference chart is provided only as a quick reference. Other lamp company brand listings may only represent a near equivalent, versus an identical match to GE Lighting brands. Individual lamp manufacturers' performance specifications should be consulted. Lamp performance may be affected by environmental conditions, ballast type and/or other auxiliary equipment.

## HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking High Intensity Discharge lamp specifications and when ordering products. Within each product line, lamps are divided into families. Within families, lamps are listed by wattage. In each of these wattage groups, lamps are listed by bulb shape.

### Bulb:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### LET (Lamp Enclosure Type):

Describes fixture requirements for this lamp (see page 3-22).

### OP (Operating Position):

(see page 3-23).

### MOL:

Maximum Overall Length in inches.

### Base:

The type of base.

### LCL:

Distance between the center of the filament and the Light Center Length reference plane, in inches.

### Order Code:

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

### Description:

The lamp's identification code.

### CBCP (Center Beam Candlepower):

For reflector type lamps. Center Beam Candlepower is the intensity (candelas) at the center or maximum intensity of the beam. Used only for ConstantColor® CMH® Metal Halide Lamps.

### Case Qty.:

Number of product units packed in a case.

### ANSI Ballast Type:

Ballast type used to operate lamp.

### Lumens - Initial:

Initial light output.

### Rated Life Hours:

Lamp burning hours to median life expectancy.

### Color Temperature Kelvins (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value the whiter or "cooler" the light appears.

### Color Rendering Index (CRI or R<sub>a</sub>):

An indication of the ability of the lamp to render object colors in a normal, natural way. The higher the number (0-100), the better the color appearance.

### Additional Information:

Typical application and/or other important information.

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
ED37	Mog	S	VBU	400	11.5	7	49656	MVR400/C/VBU	M59	6	20000	41000	26500	3700	70	Coated		121

## HIGH OUTPUT AND XHO MULTI-VAPOR® METAL HALIDE LAMPS

### 400 WATTS

# MVR400 / C / VBU

Identifies as Multi-Vapor® lamp.

Identifies the lamp's wattage.

Outer bulb finish.

Operating position (see page 3-23)

## WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

1. Identify bulb shape by using illustrations on pages 3-2 to 3-5.
2. Measure bulb diameter using ruler in Appendix section page A-1 to determine width in eighths of an inch.
3. Identify base type using table on page 3-5.
4. Find your lamp in the tabular data containing the bulb shape, size and base, which are all listed by wattage.





Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>CONSTANTCOLOR® CMH® METAL HALIDE LAMPS</b>																			
<b>PAR (COLOR STABILITY OVER LIFE ±150K)</b>																			
PAR20	Med	0	U	39	3.12		42068	CMH39/UPAR20/FL25	M130	15	7500	10000	2100		3000	86	25 Floodlight, UV control	33, 45	107
							42069	CMH39/UPAR20/SP10	M130	15	22000	10000	2100		3000	86	10 Spotlight, UV control	33, 45	107
PAR30L	Med	0	U	39	4.75		42066	CMH39/PAR30L/SP15	M130	6	29000	10000	2400		3000	81	15 Spotlight, UV control	33, 45	107
							42067	CMH39/PAR30L/FL25	M130	6	11000	10000	2400		3000	81	25 Floodlight, UV control	33, 45	107
							45066	CMH39/PAR30L/SP10	M130	6	39600	10000	2400		3000	81	10 Spotlight, UV control	33, 45	107
				70	4.75		22152	CMH70/PAR30L/830SP	M98 or M139	6	43000	10000	4700		3000	82	15 Spotlight, UV control	33, 45	107
							22159	CMH70/PAR30L/830FL	M98 or M139	6	10000	10000	4700		3000	82	40 Floodlight, UV control	33, 45	107
PAR38	Med	0	U	70	5.31		45675	CMH70/PAR38/830SP15	M98 or M139	6	40000	10000	4800		3000	82	15 Spotlight, UV control	33	108
							45677	CMH70/PAR38/830FL25	M98 or M139	6	14000	10000	4800		3000	82	25 Spotlight, UV control	33	108
							45679	CMH70/PAR38/830WF	M98 or M139	6		10000	4800		3000	82	Wide Floodlight, UV control	33	108
				100	5.31		45680	CMH100/PAR38/830S15	M90 or M140	6	45000	10000	6500		3000	81	15 Spotlight, UV control	33	108
							45681	CMH100/PAR38/830F25	M90 or M140	6	15000	10000	6500		3000	81	25 Spotlight, UV control	33	108
							45682	CMH100/PAR38/830W	M90 or M140	6		10000	6500		3000	81	Wide Floodlight, UV control	33	108
<b>ELLIPTICAL (COLOR STABILITY OVER LIFE ±150K)</b>																			
BD17	Med	E	U	70	5.43	3.37	22119	CMH70/U/830/MED	M98 or M139			15000	6300	4100	3000	80	Clear	33	116
							22124	CMH70/C/U/830/MED	M98 or M139			15000	6000	4000	3000	80	Coated	33	116
				100	5.43	3.37	22127	CMH100/U/830/MED	M90 or M140			10000V 15000H	9200V 9200H	6600V 6400H	3000	83	Clear	33	116
							22137	CMH100/C/U/830/MED	M90 or M140			10000V 15000H	8700V 8700H	6300V 6300H	3000	83	Coated	33	116
<b>SINGLE-ENDED G12 (COLOR STABILITY OVER LIFE ±150K)</b>																			
T4.5	BiPin	G12E	U	39	3.56	2.18	42070	CMH39/T/U/830/G12	M130	12		10000	3400	2400	3000	82		39, 44, 45	104
T6	BiPin	G12E	U	70	3.56	2.18	92582	CMH70/T/U/830/G12	M85, M98, or M139	12		15000	6200	5000	3000	83		39, 44, 45	104
							92583	CMH70/T/U/942/G12	M85, M98, or M139	12		15000	6400	5200	4200	93		39, 44, 45	104
				150	3.93	2.18	92584	CMH150/T/U/830/G12	M81, M102, or M142	12		12000	14000	11000	3000	82		39, 44, 45	104
							92586	CMH150/T/U/942/G12	M81, M102, or M142	12		12000	13000	11000	4200	94		39, 44, 45	104
<b>DOUBLE-ENDED TD (COLOR STABILITY OVER LIFE ±75K)</b>																			
T6	Rx7s	E	H45	70	4.5	2.25	92587	CMH70/TD/830/RX7S	M85, M98, or M139	12		15000	7000	5600	3000	81		39, 44	109
							92588	CMH70/TD/942/RX7S	M85, M98, or M139	12		15000	7000	5600	4200	88		39, 44	109
T7	Rx7s	E	H45	150	5.37	2.62	92589	CMH150/TD/830/RX7S	M81, M102, or M142	12		15000	14000	11500	3000	80		39, 44	109
							92590	CMH150/TD/942/RX7S	M81, M102, or M142	12		15000	14000	11500	4200	93		39, 44	109

# High Intensity Discharge Lamps



Bulb	Base	LET	OP Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>CONSTANTCOLOR® CMH® METAL HALIDE LAMPS (CONTINUED)</b>																		
<b>MINI'S (COLOR STABILITY OVER LIFE ±75K)</b>																		
T4.5	BiPin	G8.5E	U	20	3.37	2	92696 CMH20/TC/U/830/G8.5	M156	12		9000V 7500H	1700	1200	3000	81		33	104
				39	3.37	2	90352 CMH39/TC/U/830/G8.5	M130	12		10000	3400	2600	3000	82		44	104
				70	3.37	2	92585 CMH70/TC/U/830/G8.5	M98 or 12 M139			9000	6200	4700	3000	83		44	104
<b>HIGH-WATT CMH® SPXX</b>																		
ED37	EX39	O	VBU	320	11.31	7	17264 CMH320/PA/O	M132	6		20000	30000	24000	3700	90		33, 45	106
							17267 CMH320/C/PA/O	M132	6		20000	29000	23200	3700	90		33, 45	106
							17261 CMH350/PA/O	M131	6		20000	34000	27200	3600	90		33, 45	106
							17262 CMH350/C/PA/O	M131	6		20000	33000	26400	3600	90		33, 45	106
							17259 CMH400/PA/O	M135 or M155	6		20000	40000	32000	3700	92		33, 45	106
							17260 CMH400/C/PA/O	M135 or M155	6		20000	39000	31200	3700	92		33, 45	106
<b>CMH® CHROMAFIT™</b>																		
ED18	Mog	E	U	400	9.75	5.75	93295 CMH400/U/830/R	S51	12		20000	42000	33000	3000	85		44, 45	105
T15	Mog	E	U	250	9.75	5.75	93357 CMH250/U/830/R	S50	12		16000	25000	20000	3000	85		44, 45	105
<b>PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS</b>																		
<b>32 WATTS</b>																		
ED17	Med	O	VBD	32	5.43	3.43	12651 MXR32/C/VBD/O	M100	6		10000	2400	1700	3200	70	Coated, protected		119
							16469 MXR32/C/VBU/O	M100	6		10000	2400	1700	3200	70	Coated, protected		119
<b>50 WATTS</b>																		
BD17	Med	E	U	50	5.43	3.43	10361 MXR50/U/MED	M110	6		5000	3900	2200	3200	70	Clear		118
							10364 MXR50/C/U/MED	M110	6		5000	3500	1900	3200	70	Coated		118
							12581 MVR50/U/MED	M110	6		5000	3100	1900	4000	75	Clear		118
							12583 MVR50/C/U/MED	M110	6		5000	2900	1600	4000	75	Coated		118
ED17	Med	O	U	50	5.43	3.43	45670 MXR50/U/MED/O	M110	6		10000	3400	1700	3500	70	Clear, protected		119
							45671 MXR50/C/U/MED/O	M110	6		10000	3200	1500	3500	70	Coated, protected		119
<b>70 WATTS</b>																		
BD17	Med	E	U	70	5.43	3.43	22158 MXR70/U/MED	M98	6		12000	5500	3500	3200	70	Clear		118
							22162 MXR70/C/U/MED	M98	6		12000	5300	3300	3200	70	Coated		118
							12590 MVR70/U/MED	M98	6		12000	4700	3000	4000	75	Clear		118
							12594 MVR70/C/U/MED	M98	6		12000	4500	2800	4000	75	Coated		118
ED17	Med	O	U	70	5.43	3.43	12377 MXR70/U/MED/O	M98	6		12000	5500	3500	3200	70	Clear, protected		119
							12577 MXR70/C/U/MED/O	M98	6		12000	5300	3300	3200	70	Coated, protected		119
<b>100 WATTS</b>																		
BD17	Med	E	U	100	5.43	3.43	18680 MXR100/U/MED	M90	6		15000	9000	6200	3200	70	Clear		118
							18679 MXR100/C/U/MED	M90	6		15000	8500	5900	3200	70	Coated		118
							12652 MVR100/U/MED	M90	6		15000	8100	5800	4000	75	Clear		118
							12653 MVR100/C/U/MED	M90	6		15000	7600	4900	4000	75	Coated		118
ED17	Med	O	U	100	5.43	3.43	12381 MXR100/U/MED/O	M90	6		15000	9000	6200	3200	70	Clear, protected		119
							12579 MXR100/C/U/MED/O	M90	6		15000	8500	5900	3200	70	Coated, protected		119
<b>150 WATTS</b>																		
BD17	Med	E	U	150	5.43	3.43	22935 MXR150/U/MED	M102	6		15000	12500	8600	3200	70	Clear		118
							22936 MXR150/C/U/MED	M102	6		15000	12000	8300	3200	70	Coated		118
							12598 MVR150/U/MED	M102	6		15000	11700	8100	4000	75	Clear		118
							12604 MVR150/C/U/MED	M102	6		15000	11200	7700	4000	75	Coated		118



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>150 WATTS (CONTINUED)</b>																			
ED17	Med	0	U	150	5.43	3.43	45683	MXR150/U/MED/O	M102	6		15000	12500	8600	3500	70	Clear, protected	119	
							45688	MXR150/C/U/MED/O	M102	6		15000	12000	8300	3500	70	Coated, protected	119	
<b>175 WATTS</b>																			
BD17	Med	E	VBU	175	5.75	3.43	12636	MVR175/VBU/MED/PA	M137	6		15000	17500	13000	4000	75	Clear	43	117
							12637	MVR175/C/VBU/MED/PA	M137	6		15000	16500	12500	4000	75	Coated	43	117
BT28	EX39	0	VBU	175	8.25	5	49470	MPR175/VBU/O	M137	6		10000	14400	12000	4000	65	Clear, protected	43	119
ED23.5	Mog	E	VBU	175	7.5	5	22342	MXR175/VBU/PA	M137	6		15000	17000	12500	3200	65	Clear	43	117
							11185	MXR175/C/VBU/PA	M137	6		15000	16000	12000	3200	65	Coated	43	117
							12622	MVR175/VBU/PA	M137	6		15000	17500	13000	4000	75	Clear	43	117
							12633	MVR175/C/VBU/PA	M137	6		15000	16500	12500	4000	75	Coated	43	117
<b>250 WATTS</b>																			
BT28	EX39	0	VBU	250	8.25	5	49471	MPR250/VBU/O	M138	6		10000	23000	17000	4000	65	Clear, protected	43	119
ED28	Mog	E	VBU	250	8.25	5	26317	MVR250/VBU/PA	M138	12		15000	23000	17000	4200	65	Clear	43	117
							26319	MVR250/C/VBU/PA	M138	12		15000	21500	15500	3900	65	Coated	43	117
<b>320 WATTS</b>																			
ED28	Mog	E	VBU	320	8.25	5	27501	MVR320/VBU/HO/PA	M132	12		20000	31000	18000	4000	65	Clear	43	117
							27502	MVR320/C/VBU/HO/PA	M132	12		20000	30000	16500	3700	70	Coated	43	117
							45666	MVR320/VBU/XHO/PA	M132	12		20000	34000	25000	4000	65	Clear	43	116
							45669	MVR320/C/VBU/XHO/PA	M132	12		20000	33000	23000	3700	70	Coated	43	116
	EX39	0	VBU	320	8.25	5	19609	MPR320/C/PA/ED28	M132	12		20000	30600	24500	3700	70	Coated, protected	43	120
ED37	EX39	0	VBU	320	11.5	7	46275	MPR320/VBU/XHO/PA	M132	6		20000	32000	22500	4000	65	Clear, protected	43	120
							46276	MPR320/C/VBU/XHO/PA	M132	6		20000	30500	21500	3700	70	Coated, protected	43	120
<b>350 WATTS</b>																			
ED37	Mog	E	VBU	350	11.5	7	23729	MVR350VBUXHOPA/E	M131	6		20000	37000	27500	4000	62	Clear	43	117
							23738	MVR350CVBUXHOPAE	M131	6		20000	36000	26000	3700	65	Coated	43	117
	EX39	0	VBU	350	11.5	7	10202	MPR350/VBU/PA	M131	6		20000	35200	24600	4000	65	Clear, protected	43	120
							48824	MPR350/C/VBU/PA	M131	6		20000	33400	23500	4000	70	Coated, protected	43	120
							48825	MPR350/C/VBU/3K/PA	M131	6		20000	33400	23500	3400	70	Coated, protected	43	120
<b>400 WATTS</b>																			
ED28	Mog	E	VBU	400	8.25	5	46271	MVR400/VBU/ED28/PA	M135	12		20000	44000	28500	4000	65	Clear	43	116
							46272	MVR400/C/VBU/ED28/PA	M135	12		20000	42000	27500	3700	70	Coated	43	116

# High Intensity Discharge Lamps



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>400 WATTS (CONTINUED)</b>																			
ED37	Mog	S	VBU	400	11.5	7	45664	MVR400/VBU/HO/PA	M135	6		20000	41000	31000	4000	65	Clear	43	121
								45665 MVR400C/VBU/HO/PA	M135	6		20000	40000	30000	3700	70	Coated	43	121
								12642 MVR400/VBU/XHO/PA	M135	6		20000	44000	33000	4000	65	Clear	43	121
								12644 MVR400C/VBU/XHO/PA	M135	6		20000	42000	31500	3700	70	Coated	43	121
		E V		400	11.5	7	46632	MVR400VBD/XHO/PA	M135	6		20000	44000	35200	4000	65			
EX39	O	VBU	400	11.5	7	46273	MPR400/VBU/XHO/PA	M135	6			20000	42000	29500	4000	65	Clear, protected	43	120
								46274 MPR400C/VBUXHO/PA	M135	6		20000	40000	28000	3700	70	Coated, protected	43	120
<b>750 WATTS</b>																			
BT37	Mog	S	VBU	750	11.5	7	27219	MVR750/VBU/PA	M149	6		16000	82000	60000	4000	65	Clear	43	121
								45560 MVR750C/VBU/PA	M149	6		16000	72000	54000	3700	70	Coated	43	121
<b>1000 WATTS</b>																			
BT37	Mog	E	VBU	1000	11.3	7	10389	MVR1000/U/BT37/PA	M141	6		12000V 9000H	115000V 105000H	90000V 82000H	3900	65	Clear	43	116
<b>MULTI-VAPOR® METAL HALIDE LAMPS</b>																			
<b>150 WATTS</b>																			
ED28	Mog	E	U	150	8.25	5	13481	MVR150/U/WM	M57	12		10000V 7500H	13500V 11500H	8500V 7200H	4000	65	Clear, Watt-Miser®		117
								13490 MVR150C/U/WM	M57	12		10000V 7500H	12800V 10900H	8000V 6900H	3700	70	Coated, Watt-Miser®		117
<b>175 WATTS</b>																			
BD17	Med	E	U	175	5.75	3.43	18902	MVR175/U/MED	M57	6		10000V 6000H	13600V 11700H	8800V 7400H	4000	65	Clear		117
								26432 MVR175/U/MED/CP	M57	4		10000V 6000H	13600V 11700H	8800V 7400H	4000	65	Clear, Consumer Pack		117
								19976 MVR175C/U/MED	M57	6		10000V 6000H	12900V 11900H	8400V 7900H	3900	65	Coated		117
ED28	Mog	E	U	175	8.25	5	47760	MVR175/U	M57	12		10000V 6000H	13600V 11700H	8800V 7400H	4000	65	Clear		117
								26433 MVR175/U/CP	M57	4		10000V 6000H	13600V 11700H	8800V 7400H	4000	65	Clear, Consumer Pack		117
								47761 MVR175C/U	M57	12		10000V 6000H	12900V 11900H	8400V 7900H	3900	70	Coated		117
								17634 MVR175/SP30/U	M57	12		10000V 6000H	12000V 10300H	7600V 6500H	3000	70	RE730 Phosphor Coating		117
PAR38	Med	E		175	5.62		25218	MVR175/PAR38/FL/1	M57	6	6500	7500V	12000V	7600V	3800	65	Clear, One-piece PAR		117
<b>250 WATTS</b>																			
ED28	Mog	E	U	250	8.25	5	42729	MVR250/U	M58	12		10000V 6000H	20800V 19100H	13500V 12400H	4200	65	Clear		117
				175	8.25	5	26434	MVR250/U/CP	M58	4		10000V 6000H	20800V 19100H	13500V 12400H	4200	65	Clear, Consumer Pack		117



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>250 WATTS (CONTINUED)</b>																			
ED28	Mog	E	U	250	8.25	5	42731	MVR250/C/U	M58	12		6000H 10000V	19800V 18200H	13000V 11600H	3900	70	Coated		117
							17633	MVR250/SP30/U	M58	12		10000V 6000H	18000V 16600H	11500V 10600H	3000	70	RE730 Phosphor Coating		117
<b>360 WATTS</b>																			
ED37	Mog	S	VBU	360	11.5	7	13495	MVR360/VBU/WM/HO	M59	6		20000	36000	23500	4300	65	↔ Clear, Watt-Miser®	32	121
							13496	MVR360/C/VBU/WM/HO	M59	6		20000	35000	23000	4000	70	↔ Coated, Watt-Miser®	32	121
<b>400 WATTS</b>																			
ED28	Mog	E	U	400	8.25	5	18904	MVR400/U/ED28	M59	12		20000V 15000H	36000V 33100H	23500V 22100H	4000	65	Clear, Compact Bulb		117
							19979	MVR400/C/U/ED28	M59	12		20000V 15000H	35000V 32200H	23000V 19300H	4000	65	Coated, Compact Bulb		117
ED37	Mog	S	U	400	11.5	7	43828	MVR400/U	M59	6		20000V 15000H	36000V 33100H	23500V 22100H	4000	65	Clear		121
							26435	MVR400/U/CP	M59	4		20000V 15000H	36000V 33100H	23500V 22100H	4000	65	Clear, Consumer Pack		121
							43829	MVR400/C/U	M59	6		20000V 15000H	35000V 32200H	23000V 19300H	3700	70	Coated		121
							17632	MVR400/SP30/U	M59	6		20000V 15000H	31000V 28500H	18600V 17100H	3000	70	RE730 Phosphor Coating		121
<b>1000 WATTS</b>																			
BT37	Mog	E	U	1000	11.5	7	18205	MVR1000/U/BT37	M47	6		12000V 9000H	115000V 105000H	90000V 82000H	3700	65	Clear, Compact Bulb		117
BT56	Mog	S	U	1000	15.37	9.5	41826	MVR1000/U	M47	6		15000V 11000H	108000V 100280H	86000V 79000H	4000	65	Clear		121
							41827	MVR1000/C/U	M47	6		15000V 11000H	105000V 96600H	80000V 73000H	3700	65	Coated		121
<b>HIGH OUTPUT AND XHO MULTI-VAPOR® METAL HALIDE LAMPS</b>																			
<b>175 WATTS</b>																			
ED28	Pos Mog	E	HOR	175	8.25	5	18104	MVR175/HOR	M57	12		10000	15000	7700	4000	65	Clear, Position Oriented Socket Required		117
							18105	MVR175/C/HOR	M57	12		10000	14100	7500	3500	70	Coated, Position Oriented Socket Required		117
<b>250 WATTS</b>																			
ED28	Pos Mog	E	HOR	250	8.25	5	18101	MVR250/HOR	M58	12		15000	21000	10000	4200	65	Clear, Position Oriented Socket Required		117
							18103	MVR250/C/HOR	M58	12		15000	19700	9400	3600	70	Coated, Position Oriented Socket Required		117
<b>360 WATTS – WATT-MISER® ENERGY-SAVING REPLACEMENT FOR 400W METAL HALIDE</b>																			
ED37	Mog	S	VBU	360	11.5	7	40053	MVR360/VBU/WM/XHO	M59	6		20000	39000	25500	4200	65	↔ Clear, Watt-Miser®	32	121
							40055	MVR360/C/VBU/WM/XHO	M59	6		20000	37500	24500	4000	70	↔ Coated, Watt-Miser®	32	121
							47685	MVR360/VBU/STB/WM	M59	6		20000	36000	27000	4300	65	↔ Clear, Watt-Miser®, StayBright®	32	121
							47686	MVR360/C/VBU/STB/WM	M59	6		20000	35000	26000	4000	70	↔ Coated, Watt-Miser®, StayBright®	32	121
<b>400 WATTS</b>																			
BT28	Mog	E	HOR	400	8.25	5	40201	MVR400/HOR/BT28	M59	12		20000	37000	22000	4200	65	Clear, Compact Bulb		117
BT37	Mog	E	HOR	400	11.5	7	26218	MVR400/HOR/MOG	M59	6		20000	38000	22500	4200	65	Clear		117
							26219	MVR400/C/HOR/MOG	M59	6		20000	36800	22000	3900	70	Coated		117
ED28	Mog	E	VBU	400	8.31	7	40335	MVR400/VBU/BT28	M59	12		20000	41000	26500	4000	65	Clear, Compact Bulb		117

# High Intensity Discharge Lamps



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>HIGH OUTPUT AND XHO MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>400 WATTS (CONTINUED)</b>																			
ED37	Mog	S	VBU	400	11.5	7	26865	MVR400/VBU/STB/HO	M59	6		20000	41000	31000	4000	65	Clear, StayBright®	121	
							26866	MVR400/CVBU/STB/HO	M59	6		20000	41000	29500	3700	70	Coated, StayBright®	121	
							49657	MVR400/VBU/HO	M59	6		20000	41000	26500	4000	65	Clear	121	
							49656	MVR400/C/VBU	M59	6		20000	41000	26500	3700	70	Coated	121	
							49655	MVR400/VBD	M59	6		20000	41000	26500	4000	65	Clear	121	
							20931	MVR400/SP30/VBU/HO	M59	6		20000	34000	20400	3200	70	RE730 Phosphor Coating, Vertical Base Up ±15°	121	
							13923	MVR400/VBU/XHO	M59	6		20000	43000	28000	4000	65	Clear	121	
							13924	MVR400/C/VBU/XHO	M59	6		20000	42000	27000	3700	70	Coated	121	
<b>1000 WATTS</b>																			
BT56	Mog	O	VBU	1000	15.37	9.5	41433	MPR1000/VBU/O	M47	6		12000	107000	85500	3500	65	Clear, Protected	119	
		S	VBU	1000	15.37	9.5	44835	MVR1000/VBU/HO	M47	6		15000V111000V	87000V	3800	65	Clear	121		
							13137	MVR1000/C/VBU/HO	M47	6		15000V107000V	81500V	3700	70	Coated	121		
<b>SPORTSLIGHTING</b>																			
<b>1000 WATTS</b>																			
PAR64	G38	E	U	1000	6.87		29333	SPL1000/PAR64840	-		11350000	3500	63000	53000	4000	80	Clear, Narrow Spot, 6° Beam, 1,350,000 CBCP	38	124
							29336	SPL1000/PAR64/HR	-		11350000	3500	63000	53000	4000	80	Clear, Narrow Spot, 6° Beam, 1,350,000 CBCP	38	124
<b>1500 WATTS</b>																			
BT56	Mog	E	U	1500	15.37	9.5	47326	MVR1500/U/SPORTS	M48	6		3000V170000V	153000V	4000	65	Clear		17, 42	117
							37405	MVR1500/HBU	M48	6		3000H162000H	143000H	3900	65	Clear		16, 17	117
												3000H155000H	130000H						
T7	Rx7s	E	HOR	1500	10.12	5	30061	SPL1500/L/H/652	-	1		6000	120000	90000	5200	80	Frosted	38	125
<b>1650 WATTS</b>																			
BT56	Pos Mog	E	HOR	1650	15.37	9.5	25532	MVR1650/HOR	M112	6		3000	177000	145000	3200	65	Clear, Position Oriented Socket Required	17	117
<b>2000 WATTS</b>																			
T9	#10 Spade	E	HOR	2000	10	4.3	12275	MQI2000/T9/40	M134	10		4000	200000	160000	4000	65	Clear		125
<b>PROTECTED MULTI-VAPOR® METAL HALIDE LAMPS</b>																			
<b>32 WATTS</b>																			
ED17	Med	O	VBD	32	5.43	3.43	12651	MXR32/C/VBD/O	M100	6		10000	2400	1700	3200	70	Coated, protected	119	
							16469	MXR32/C/VBU/O	M100	6		10000	2400	1700	3200	70	Coated, protected	119	
<b>50 WATTS</b>																			
ED17	Med	O	U	50	5.43	3.43	45670	MXR50/U/MED/O	M110	6		10000	3400	1700	3500	70	Clear, protected	119	
							45671	MXR50/C/U/MED/O	M110	6		10000	3200	1500	3500	70	Coated, protected	119	
<b>70 WATTS</b>																			
ED17	Med	O	U	70	5.43	3.43	12377	MXR70/U/MED/O	M98	6		12000	5500	3500	3200	70	Clear, protected	119	
							12577	MXR70/C/U/MED/O	M98	6		12000	5300	3300	3200	70	Coated, protected	119	
<b>100 WATTS</b>																			
ED17	Med	O	U	100	5.43	3.43	12381	MXR100/U/MED/O	M90	6		15000	9000	6200	3200	70	Clear, protected	119	
							12579	MXR100/C/U/MED/O	M90	6		15000	8500	5900	3200	70	Coated, protected	119	



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>PROTECTED MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>150 WATTS</b>																			
ED17	Med	0	U	150	5.43	3.43	45683	MXR150/U/MED/O	M102	6		15000	12500	8600	3500	70	Clear, protected	119	
							45688	MXR150/C/U/MED/O	M102	6		15000	12000	8300	3500	70	Coated, protected	119	
<b>175 WATTS</b>																			
BT28	EX39	0	VBU	175	8.25	5	49470	MPR175/VBU/O	M57	6		10000	14400	10200	4000	65	Clear, protected	119	
							11649	MPR175/C/VBU/O	M57	6		10000	14000	10000	3800	70	Coated, protected	119	
<b>250 WATTS</b>																			
BT28	EX39	0	VBU	250	8.25	5	49471	MPR250/VBU/O	M58	6		10000	23000	17000	4000	65	Clear, protected	119	
							11650	MPR250/C/VBU/O	M58	6		10000	20500	17000	3800	70	Coated, protected	119	
<b>320 WATTS</b>																			
ED37	EX39	0	VBU	320	11.5	7	46275	MPR320/VBU/XHO/PA	M132	6		20000	32000	22500	4000	65	Clear, protected	120	
									or M154										
							46276	MPR320/C/VBU/XHO/PA	M132	6		20000	30500	21500	3700	70	Coated, protected	120	
									or M154										
<b>350 WATTS</b>																			
ED37	EX39	0	VBU	350	11.5	7	10202	MPR350/VBU/PA	M131	6		20000	35200	28200	4000	65	Clear, protected	43	120
							48824	MPR350/C/VBU/PA	M131	6		20000	33400	26700	3700	70	Coated, protected	43	120
							48825	MPR350/C/VBU/3K/PA	M131	6		20000	33400	26700	3200	70	Coated, protected	43	120
<b>360 WATTS – WATT-MISER® ENERGY-SAVING REPLACEMENT FOR 400W METAL HALIDE</b>																			
ED37	Mog	0	VBU	360	11.5	7	40056	MPR360/VBU/WM/HO/O	M59	6		20000	36000	23500	4000	65	➔ Clear, protected	32	119
							11685	MPR360C/VBUWMHO/O	M59	6		20000	35000	22500	3700	70	➔ Coated, protected	32	119
<b>400 WATTS</b>																			
ED37	Mog	0	VBU	400	11.5	7	18708	MPR400/VBU/HO/O	M59	6		20000	40000	26000	3400	65	Clear, protected	119	
							13582	MPR400/C/VBU/HO/O	M59	6		20000	38000	25000	3200	70	Coated, protected	119	
	EX39	0	VBU	400	11.5	7	46273	MPR400/VBU/XHO/PA	M135	6		20000	42000	29500	4000	65	Clear, protected	43	120
									or M155										
							46274	MPR400/C/VBUXHO/PA	M135	6		20000	40000	28000	3700	70	Coated, protected	43	120
									or M155										
<b>1000 WATTS</b>																			
BT56	Mog	0	VBU	1000	15.37	9.5	41433	MPR1000/VBU/O	M47	6		12000	107000	85500	3500	65	Clear, Protected	119	
<b>CHROMAFIT™ MULTI-VAPOR® METAL HALIDE LAMPS (HPS RETROFIT LAMPS)</b>																			
<b>250 WATTS</b>																			
ED28	Mog	E	VBU	250	8.25	5.75	12762	MVR250/VBU/R	S50	12		10000	18500	13900	4500	65	Clear, HPS Retrofit	116	
							12769	MVR250/C/VBU/R	S50	12		10000	18000	13000	4000	70	Coated, HPS Retrofit	116	
<b>400 WATTS</b>																			
ED28	Mog	E	U	400	8.31	5	26851	MVR400/U/ED28/R	S51	12		20000V 15000H	36000V 33100H	22000V 20200H	4000	65	Clear, HPS Retrofit, Compact Bulb	116	
ED37	Mog	S	VBU	400	11.5	5.75	12770	MVR400/VBU/R	S51	6		20000	37600	22600	4500	65	Clear, HPS Retrofit	122	
							12772	MVR400/C/VBU/R	S51	6		20000	35700	21400	4000	70	Coated, HPS Retrofit	122	
<b>I-LINE MULTI-VAPOR® METAL HALIDE LAMPS (MERCURY RETROFIT LAMPS)</b>																			
<b>325 WATTS</b>																			
ED37	Mog	S	U	325	11.5	7	10687	MVR325/I/U/WM	H33	6		20000V 10000H	28000V 25800H	13300V 12200H	4000	65	➔ Clear, Retrofit for 400W Mercury, Watt-Miser®	121	
							10688	MVR325/C/I/U/WM	H33	6		20000V 10000H	26300V 24200H	12900V 11800H	3700	70	➔ Coated, Retrofit for 400W Mercury, Watt-Miser®	121	

# High Intensity Discharge Lamps



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>I-LINE MULTI-VAPOR® METAL HALIDE LAMPS (MERCURY RETROFIT LAMPS) (CONTINUED)</b>																			
<b>400 WATTS</b>																			
ED37	Mog	S	U	400	11.5	7	43817	MVR400/I/U	H33 or M59	6		15000V 10000H	36000V 33100H	24000V 22100H	4000	65	Clear, Retrofit for 400W Mercury	121	
							43818	MVR400/C/I/U	H33 or M59	6		15000V 10000H	35000V 32200H	21000V 19300H	3700	70	Coated, Retrofit for 400W Mercury	121	
<b>950 WATTS ENERGY-SAVING REPLACEMENT FOR 1000W MERCURY</b>																			
BT56	Mog	S	VBU	950	15.06	9.5	39097	MVR950/I/VBU	H36 or M47	6		12000	100000	62900	3800	65	Coated, Retrofit for 1000W Mercury, Watt-Miser®	121	
<b>SAF-T-GARD® SELF-EXTINGUISHING MULTI-VAPOR® LAMPS</b>																			
<b>400 WATTS</b>																			
ED37	Mog	S	U	400	11.5	7	11146	MVT400/I/U	H33 or M59	6		15000V 10000H	36000V 33100H	23500V 22100H	4000	65	Clear, Retrofit for 400W Mercury	123	
							11119	MVT400/C/I/U	H33 or M59	6		15000V 10000H	35000V 32200H	23000V 19300H	3700	70	Coated, Retrofit for 400W Mercury	123	
			VBU	400	11.5	7	11144	MVT400/VBU	M59	6		20000	41000	26500	4000	65	Clear	123	
							11145	MVT400/C/VBU	M59	6		20000	41000	26500	3700	70	Coated	123	
<b>ARCSTREAM® METAL HALIDE LAMPS</b>																			
<b>70 WATTS</b>																			
T6	R7s	E	HOR	70	4.68		34530	ARC70/TD/UVC/730	M85	12		6000	6000	4800	3000	75	Clear	103	
							34536	ARC70/TD/UVC/743	M85	12		6000	6000	4800	4300	75	Clear	103	
<b>150 WATTS</b>																			
CAP	BiPin GY9.5	E	U	150	1.62	1.12	34813	CSS150/CAP/50	M81	10		1000	10000	8000	5000	80	Clear, Disco Lamp	102	
T6	BiPin G12	E	U	150	3	2.25	21053	ARC150T/U/830G12	M81	10		6000	12000	9500	3000	80	Clear	102	
							21054	ARC150T/U/840G12	M81	10		6000	11500	10500	4000	80	Clear	102	
T7	R7s	E	HOR	150	5.37		34527	ARC150/TD/UVC/730	M81	12		6000	13000	11000	3000	75	Clear	103	
							34535	ARC150/TD/UVC/742	M81	12		6000	12000	10000	4200	75	Clear	103	
<b>250 WATTS</b>																			
T15	Mog	E	HOR	250	8.37	5.62	26683	ARC250/T/H/960/E	M80	12		10000	19000	13300	6000	90	Clear, Daylight Color	101	
<b>400 WATTS</b>																			
ED18	Mog	E	HOR	400	10.5	6.75	26685	KRC400/T/H/960/E	M135	12		10000	25000	17500	6000	90	Clear, Daylight Color	110	
<b>LUCALOX® HIGH PRESSURE SODIUM LAMPS</b>																			
<b>35 WATTS</b>																			
B17	Med	O	U	35	5.43	3.43	11668	LU35/MED	S76	6		16000	2250	2025	1900	22	Clear	111	
							26420	LU35/MED/CP	S76	4		16000	2250	2025	1900	22	Clear, Consumer Pack	111	
							11669	LU35/D/MED	S76	6		16000	2150	1935	1900	22	Diffuse	111	
<b>50 WATTS</b>																			
B17	Med	O	U	50	5.43	3.43	11345	LU50/MED	S68	6		24000+	4000	3600	1900	22	Clear	111	
							26421	LU50/MED/CP	S68	4		24000+	4000	3600	1900	22	Clear, Consumer Pack	111	
							11347	LU50/D/MED	S68	6		24000+	3800	3420	1900	22	Diffuse	111	
ED23.5	Mog	O	U	50	7.75	5	44975	LU50	S68	12		24000+	4000	3600	1900	22	Clear	111	
							26425	LU50/CP	S68	4		24000+	4000	3600	1900	22	Clear, Consumer Pack	111	
							45006	LU50/D	S68	12		24000+	3800	3420	1900	22	Diffuse	111	
<b>70 WATTS</b>																			
B17	Med	O	U	70	5.43	3.43	11339	LU70/MED	S62	6		24000+	6400	5450	1900	22	Clear	111	
							26422	LU70/MED/CP	S62	4		24000+	6400	5450	1900	22	Clear, Consumer Pack	111	
							11340	LU70/D/MED	S62	6		24000+	5950	5050	1900	22	Diffuse	111	





Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes Warning
<b>LUCALOX® HIGH PRESSURE SODIUM LAMPS (CONTINUED)</b>																		
<b>70 WATTS (CONTINUED)</b>																		
ED23.5	Mog	0	U	70	7.75	5	44033	LU70	S62	12		24000+	6400	5450	1900	22	Clear	111
							26426	LU70/CP	S62	4		24000+	6400	5450	1900	22	Clear, Consumer Pack	111
							44035	LU70/D	S62	12		24000+	5950	5050	1900	22	Diffuse	111
<b>100 WATTS</b>																		
B17	Med	0	U	100	5.5	3.43	13250	LU100/MED	S54	6		24000+	9500	8550	2000	22	Clear	111
							26423	LU100/MED/CP	S54	4		24000+	9500	8550	2000	22	Clear, Consumer Pack	111
							13251	LU100/D/MED	S54	6		24000+	8800	7920	2000	22	Diffuse	111
ED23.5	Mog	0	U	100	7.75	5	44037	LU100	S54	12		24000+	9500	8550	2000	22	Clear	111
							26427	LU100/CP	S54	4		24000+	9500	8550	2000	22	Clear, Consumer Pack	111
							44038	LU100/D	S54	12		24000+	8800	7920	2000	22	Diffuse	111
<b>150 WATTS</b>																		
B17	Med	0	U	150	5.75	3.5	13252	LU150/MED	S55	6		24000+	16000	14400	2000	22	Clear	111
							26424	LU150/MED/CP	S55	4		24000+	16000	14400	2000	22	Clear, Consumer Pack	111
							13253	LU150/D/MED	S55	6		24000+	15000	13500	2000	22	Diffuse	111
ED23.5	Mog	0	U	150	7.75	5	44043	LU150/55	S55	12		24000+	16000	14400	2000	22	Clear	111
							26429	LU150/55/CP	S55	4		24000+	16000	14400	2000	22	Clear, Consumer Pack	111
							44045	LU150/55/D	S55	12		24000+	15000	13500	2000	22	Diffuse	111
ED28	Mog	0	U	150	8.31	5	44243	LU150/100(ED28)	S56	12		24000+	15000	13500	2000	22	Clear	111
<b>200 WATTS</b>																		
ED18	Mog	0	U	200	9.75	5.75	44206	LU200	S66	12		24000+	22000	19800	2100	22	Clear	111
<b>250 WATTS</b>																		
ED18	Mog	0	U	250	9.75	5.75	44047	LU250	S50	12		24000+	28000	27000	2100	22	Clear	111
							26430	LU250/CP	S50	4		24000+	28000	27000	2100	22	Clear, Consumer Pack	111
ED28	Mog	0	U	250	9	5	44051	LU250/D	S50	12		24000+	26000	23400	2100	22	Diffuse	111
<b>310 WATTS</b>																		
ED18	Mog	0	U	310	9	5.75	44053	LU310	S67	12		24000+	37000	33300	2100	22	Clear	111
<b>400 WATTS</b>																		
ED18	Mog	0	U	400	9	5.75	44054	LU400	S51	12		24000+	51000	45000	2100	22	Clear	111
					9.75	5.75	26431	LU400/CP	S51	4		24000+	51000	45000	2100	22	Clear, Consumer Pack	111
ED37	Mog	0	U	400	11.31	7	44056	LU400/D	S51	6		24000+	47500	42750	2100	22	Diffuse	111
T7	Rx7s	0	HOR	400	10.12		30244	LU400/TD	S51	10		24000	43000	37300	2000	25	Clear, Double-ended, Horizontal Burn $\pm 20^\circ$	111
<b>600 WATTS</b>																		
T15	Mog	0	U	600	11.06	6.62	27187	LU600/T	S106	12		12000+	90000	81000	2000	22	Clear	112
<b>750 WATTS</b>																		
ED37	Mog	0	U	750	11.5	6.75	14682	LU750	S111	6		24000+	110000	99000	2100	22	Clear	112
<b>1000 WATTS</b>																		
E25	Mog	0	U	1000	15.06	8.75	44058	LU1000/ECO	S52	6		24000+	140000	126000	2100	22	Clear	111
T7	Rx7s	0	HOR	1000	13.18		30246	LU1000/TD	S52	10		24000	137500	118200	2000	25	Clear, Double-ended, Horizontal Burn $\pm 20^\circ$	111
<b>STANDBY LONGLIFE LUCALOX® LAMPS</b>																		
<b>70 WATTS</b>																		
ED23.5	Mog	0	U	70	7.75	5	19264	LU70/SBY/XL	S62	12		40000	6400	5050	2000	22	Clear, Standby Longlife, Dual Arc Tube	111

# High Intensity Discharge Lamps



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>STANDBY LONGLIFE LUCALOX® LAMPS (CONTINUED)</b>																			
<b>100 WATTS</b>																			
ED23.5	Mog	0	U	100	7.75	5	19265	LU100/SBY/XL	S54	12		40000	9500	8190	2000	22	Clear, Standby Longlife, Dual Arc Tube	111	
<b>150 WATTS</b>																			
ED23.5	Mog	0	U	150	7.75	5	19266	LU150/55/SBY/XL	S55	12		40000	16000	14000	2000	22	Clear, Standby Longlife, Dual Arc Tube	111	
<b>200 WATTS</b>																			
ED18	Mog	0	U	200	9.75	5.75	23431	LU200/SBY/XL	S66	12		40000	21500	18150	2000	22	Clear, Standby Longlife, Dual Arc Tube	111	
<b>250 WATTS</b>																			
ED18	Mog	0	U	250	9.75	5.75	19270	LU250/SBY/XL	S50	12		40000	27500	24750	2000	22	Clear, Standby Longlife, Dual Arc Tube	111	
<b>400 WATTS</b>																			
ED18	Mog	0	U	400	9.75	5.75	19272	LU400/SBY/XL	S51	12		40000	50000	45000	2000	22	Clear, Standby Longlife, Dual Arc Tube	111	
<b>1000 WATTS</b>																			
E25	Mog	0	U	1000	15.06	8.75	27185	LU1000/SBY/XL	S52	6		40000	127000	115000	2100	22	Clear, Standby Longlife, Dual Arc Tube	111	
<b>ECOLUX® NC NON-CYCLING HIGH PRESSURE SODIUM LAMPS (TCLP COMPLIANT)</b>																			
<b>70 WATTS</b>																			
ED23.5	Mog	0	U	70	7.75	5	14672	LU70/ECO/NC	S62	12		30000	6300	5670	1900	23	Clear, Non-Cycling, TCLP Compliant	111	
<b>100 WATTS</b>																			
ED23.5	Mog	0	U	100	7.75	5	14673	LU100/ECO/NC	S54	12		30000	10500	9450	2000	23	Clear, Non-Cycling, TCLP Compliant	111	
<b>150 WATTS</b>																			
ED23.5	Mog	0	U	150	7.75	5	40390	LU150/ECO/NC	S55	12		30000	16000	14400	2000	23	Clear, Non-Cycling, TCLP Compliant	111	
<b>200 WATTS</b>																			
ET18	Mog	0	U	200	9.75	5.75	45059	LU200/ECO/NC	S66	20		30000	22000	19800	2100	22	Clear, Non-Cycling, TCLP Compliant	111	
<b>250 WATTS</b>																			
ED18	Mog	0	U	250	9.75	5.75	14674	LU250/ECO/NC	S50	12		30000	29000	26100	2000	30	Clear, Non-Cycling, TCLP Compliant	111	
<b>400 WATTS</b>																			
ED18	Mog	0	U	400	9.75	5.75	14675	LU400/ECO/NC	S51	12		30000	54000	48600	2100	30	Clear, Non-Cycling, TCLP Compliant	111	
<b>ECOLUX® HIGH PRESSURE SODIUM LAMPS (TCLP COMPLIANT)</b>																			
<b>70 WATTS</b>																			
ED23.5	Mog	0	U	70	7.75	5	45760	LU70/ECO	S62	12		24000+	6400	5450	1900	22	Clear, TCLP Compliant	111	
<b>100 WATTS</b>																			
ED23.5	Mog	0	U	100	7.75	5	45761	LU100/ECO	S54	12		24000+	9500	8550	2000	22	Clear, TCLP Compliant	111	
<b>150 WATTS</b>																			
ED23.5	Mog	0	U	150	7.75	5	45762	LU150/55/ECO	S55	12		24000+	16000	14400	2000	22	Clear, TCLP Compliant	111	
<b>200 WATTS</b>																			
ED18	Mog	0	U	200	9.75	5.75	45763	LU200/ECO	S66	12		24000+	22000	19800	2100	22	Clear, TCLP Compliant	111	



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>ECOLUX® HIGH PRESSURE SODIUM LAMPS (TCLP COMPLIANT) (CONTINUED)</b>																			
<b>250 WATTS</b>																			
ED18	Mog	0	U	250	9.75	5.75	45764	LU250/ECO	S50	12		24000+	28000	27000	2100	22	Clear, TCLP Compliant	111	
<b>400 WATTS</b>																			
ED18	Mog	0	U	400	9	5.75	45765	LU400/ECO	S51	12		24000+	51000	45000	2100	22	Clear, TCLP Compliant	111	
<b>DELUXE LUCALOX® HIGH PRESSURE SODIUM LAMPS</b>																			
<b>70 WATTS</b>																			
B17	Med	0	U	70	5.5	3.5	16611	LU70/DX/MED	S62	6		10000	3800	3040	2200	65	Clear, Improved CRI	111	
<b>150 WATTS</b>																			
B17	Med	0	U	150	5.75	3.5	18094	LU150/DX/MED	S54	6		15000	10500	9135	2200	65	Clear, Improved CRI	111	
ED23.5	Mog	0	U	150	7.75	5	18092	LU150/55/DX	S55	12		15000	10500	9135	2200	65	Clear, Improved CRI	111	
<b>250 WATTS</b>																			
ED18	Mog	0	U	250	9.75	5.75	11785	LU250/DX	S50	12		15000	22500	20700	2200	65	Clear, Improved CRI	111	
<b>400 WATTS</b>																			
ED28	Mog	0	U	400	9	5.18	19650	LU400/DX	S51	12		15000	37400	34400	2200	70	Clear, Improved CRI	111	
<b>E-Z LUX® HIGH PRESURE SODIUM LAMPS (MERCURY RETROFIT)</b>																			
<b>150 WATTS</b>																			
ED28	Mog	0	U	150	9	5	49943	LUH150/EZ	H39	12		13000	12500	12000	1900	22	↔ Clear, Energy-Saving Retrofit for 175W Mercury	46	111
<b>215 WATTS</b>																			
ED28	Mog	0	U	215	9	5	49939	LUH215/EZ	H37	12		12000	20200	18600	1900	22	↔ Clear, Energy-Saving Retrofit for 250W Mercury	47	111
<b>360 WATTS</b>																			
BT37	Mog	0	U	360	11.31	7.12	18012	LUH360/EZ	H33	6		24000	45000	40500	2100	25	↔ Clear, Energy-Saving Retrofit for 400W Mercury	48	111
<b>SOX LOW PRESSURE SODIUM LAMPS</b>																			
<b>18 WATTS</b>																			
T16	BY22d	E		18	8.5	5.37	21294	SOX18	L69	16		18000	1800	1570	1800	0	Clear, Horizontal Burn ±20° or Vertical	111	
<b>35 WATTS</b>																			
T16	BY22d	E		35	12.25	7.25	21296	SOX35	L70	16		18000	4600	4000	1800	0	Clear, Horizontal Burn ±20° or Vertical	111	
<b>55 WATTS</b>																			
T16	BY22d	E		55	16.75	9.5	21297	SOX55	L71	16		18000	7650	6655	1800	0	Clear, Horizontal Burn ±20° or Vertical	111	
<b>90 WATTS</b>																			
T21	BY22d	E		90	20.75	11.5	21298	SOX90	L72	9		16000	12750	11095	1800	0	Clear, Horizontal Burn ±20°	111	
<b>135 WATTS</b>																			
T21	BY22d	E		135	30.5	16.37	21299	SOX135	L73	9		16000	22000	19140	1800	0	Clear, Horizontal Burn ±20°	111	
<b>MERCURY LAMPS</b>																			
<b>40/50 WATTS</b>																			
B17	Med	0	U	50 40	5.12	3.12	12460	HR40/50DX45-46	H45	5		6000	1575 1140	1250 910	3900	50	40W on H45 Ballast, 50W on H46 Ballast, Deluxe White	113	
<b>75 WATTS</b>																			
B17	Med	0	U	75	5.43	3.5	12461	HR75DX43	H43	5		16000	2700	2250	3900	50	Deluxe White	113	

# High Intensity Discharge Lamps



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens		Color Temp.		Additional Information	Foot- notes	Warning
													Initial	Mean	K	CRI			
<b>MERCURY LAMPS (CONTINUED)</b>																			
<b>100 WATTS</b>																			
A23.5	Med	O	U	100	5.43	3.5	12464	HR100A38/A23	H38	5		18000	3700	2400	5700	15	Clear	113	
							12467	HR100DX38/A23	H38	5		18000	4000	2600	3800	50	Deluxe White	113	
B17	Med	O	U	100	5.43	3.5	17113	HR100DX38/MED	H38	5		18000	4000	2600	3900	50	Deluxe White	113	
ED23.5	Mog	O	U	100	7.5	5	12471	HR100A38	H38	5		24000+	3850	2500	5700	15	Clear	113	
							22575	HR100DX38	H38	12		24000+	4000	2600	3900	50	Deluxe White	113	
							26437	HR100DX38/CP	H38	4		24000+	4000	2600	3900	50	Deluxe White, Consumer Pack	113	
R40	Med	O	U	100	7		36238	HR100RFL38	H38	12		24000+	2450	2000	5700	15	Reflector Flood, 48° Beam Spread	113	
							36495	HR100RDXFL38	H38	12		24000+	2450	2050	3900	50	Deluxe White, Reflector WFL, 140° Beam Spread	113	
<b>175 WATTS</b>																			
ED28	Mog	O	U	175	8.25	5	24048	HR175A39	H39	12		24000+	7850	6830	5700	15	Clear	113	
							26440	HR175A39/CP	H39	4		24000+	7850	6830	5700	15	Clear, Consumer Pack	113	
							24062	HR175DX39	H39	12		24000+	7800	6800	3900	50	Deluxe White	113	
							26439	HR175DX39/CP	H39	4		24000+	7800	6800	3900	50	Deluxe White, Consumer Pack	113	
R40	Med	O	U	175	7		24058	HR175RFL39	H39	12		24000+	5700	4800	5700	15	Clear, Reflector Flood, 40° Beam Spread	113	
							33026	HR175RDXFL39	H39	12		24000+	5700	4350	3900	50	Deluxe White, Reflector WFL, 120° Beam Spread	113	
	Mog	O	U	175	7.5		36445	HR175RFL39/M	H39	12		24000+	5700	4800	5700	15	Clear, Reflector Flood, 40° Beam Spread	113	
<b>250 WATTS</b>																			
ED28	Mog	O	U	250	8.25	5	24068	HR250A37	H37	12		24000	11000	8250	5700	15	Clear	113	
							32127	HR250DX37	H37	12		24000+	11200	8400	3900	50	Deluxe White	113	
<b>400 WATTS</b>																			
BT37	Mog	O	U	400	11.31	7	32313	HR400DX33/BT	H33	6		24000+	22600	14400	3900	50	Deluxe White	113	
ED37	Mog	O	U	400	11.31	7	23974	HR400A33	H33	6		24000+	21000	13400	5700	15	Clear	113	
							23998	HR400DX33	H33	6		24000+	22600	14400	3900	50	Deluxe White	113	
R52	Mog	O	U	400	11.75		33879	HR400RDX33	H33	6		24000+	20800	13400	3900	50	Reflector, Deluxe White, 160° Beam Spread	113	
R60	Mog	O	U	400	10.12		33938	HR400RDXFL33	H33	6		24000+	15500	8950	3900	50	Reflector WFL, Deluxe White, Clear Face, 110°	113	
<b>1000 WATTS</b>																			
BT56	Mog	O	U	1000	15.06	9.5	24171	HR1000A36	H36	6		24000+	57000	28500	5700	15	Clear	113	
							24191	HR1000DX36	H36	6		24000+	58000	29000	3900	50	Deluxe White	113	
						9.37	32733	HR1000DX34	H34	6		16000	58300	29200	3900	50	Deluxe White	28	113
<b>SAF-T-GARD® MERCURY LAMPS</b>																			
<b>175 WATTS</b>																			
ED28	Mog	O	U	175	8.25	5	43391	HT175DX39	H39	12		16000	7800	6800	3900	50	Deluxe White	114	
<b>400 WATTS</b>																			
ED37	Mog	O	U	400	11.31	7	43363	HT400DX33	H33	6		24000	22600	14400	3900	50	Deluxe White	114	
<b>E-Z MERC® SELF-BALLASTED LAMPS (INCANDESCENT RETROFIT)</b>																			
<b>160 WATTS</b>																			
ED24	Med	O	U	160	7	4.5	45178	HSB160/M		24		12000	2300	1600	3900	50	Deluxe White, 120V	9	115
<b>250 WATTS</b>																			
ED28	Med	O	U	250	8.5	5.18	45174	HSB250M		12		12000	5000	3750	3900	50	Deluxe White, 120V	9	115
							45176	HSB250		12		12000	5000	3750	3900	50	Deluxe White, 120V	9	115



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>E-Z MERC® SELF-BALLASTED LAMPS (INCANDESCENT RETROFIT) (CONTINUED)</b>																			
<b>450 WATTS</b>																			
BT37	Mog	O	U	450		7.37	40122	HSB450		6		16000	9100	8280	3900	50	Deluxe White, 120V	9	115
<b>750 WATTS</b>																			
R57	Mog	O	U	750	12.75	8.37	44012	HSB750R/120		6		16000	14000	11200	3900	50	Deluxe White, Reflector Flood, 120V, 130° Beam	9	115
<b>EXPORT LAMPS</b>																			
<b>METAL HALIDE</b>																			
BD17	E27	E	U	100	5.43	3.43	18684	MXR100/C/U/27	M90	6		15000	8500	5900	3200	70	Coated		117
BT56	E40	S	U	1000	15.37	9.5	41828	MVR1000/U/40	M47	6		15000V108000V	86000V	86000V	4000	65	Clear		121
							41829	MVR1000/C/U/40	M47	6		15000V105000V	80000V	80000V	3700	65	Coated		121
ED17	E27	O	VBU	32	5.43	3.43	16893	MXR32/C/VBU/O/27	M100	6		10000	2400	1700	3200	70	Coated, protected		119
ED28	E40	E	U	175	8.25	5	47762	MVR175/U/40	M57	12		10000V	13600V	8800V	4000	65	Clear		14
							47763	MVR175/C/U/40	M57	12		6000H	11700H	7400H			Coated		14
							17714	MVR175/SP30/U/40	M57	12		10000V	12900V	8400V	3900	70	RE730 Phosphor Coating		14
							44542	MVR250/U/40	M58	12		10000V	12000V	7600V	3000	70	RE730 Phosphor Coating		14
							44542	MVR250/U/40	M58	12		6000H	10300H	6500H			Clear		14
				250	8.25	5	44543	MVR250/C/U/40	M58	12		10000V	20800V	13500V	4200	65	Clear		14
							44543	MVR250/C/U/40	M58	12		6000H	19100H	12400H			Coated		14
							17715	MVR250/SP30/U/40	M58	12		10000V	19800V	13000V	3900	70	RE730 Phosphor Coating		14
							17715	MVR250/SP30/U/40	M58	12		6000H	18200H	11600H			RE730 Phosphor Coating		14
ED37	E40	S	U	400	11.5	7	43907	MVR400/U/40	M59	6		20000V	36000V	23500V	4000	65	Clear		14
							43908	MVR400/C/U/40	M59	6		15000H	33100H	22100H			Coated		14
							49860	MVR400/VBU/40	M59	6		20000	41000	26500	4000	65	Clear, Vertical Base Up ±15°		121
							49857	MVR400/C/VBU/40	M59	6		20000	41000	25000	3700	70	Coated, Vertical Base Up ±15°		121
							46420	MVR400/VBU/STB/40	M59	6		20000	41000	31000	4000	65	Clear, StayBright®		121
							46421	MVR400/C/VBU/STB/40	M59	6		20000	41000	29500	3700	70	Coated, StayBright®		121
							17716	MVR400/SP30/U/40	M59	6		20000V	31000V	18600V	3000	70	RE730 Phosphor Coating		14
							17716	MVR400/SP30/U/40	M59	6		15000H	28500H	17100H			RE730 Phosphor Coating,		14
							21440	MVR400/SP30/VBU/40	M59	6		20000	34000	20400	3200	70	RE730 Phosphor Coating, Vertical Base Up ±15°		121
							18709	MPR400/VBU/O/40	M59	6		20000	40000	24900	3400	65	Clear, Vertical Base Up ±15°, Shrouded A		119
<b>LUCALOX® HIGH PRESSURE SODIUM</b>																			
ED18	E40	O	U	250	9.75	5.75	44048	LU250/40	S50	12		24000+	28000	27000	2100	22	Clear		111
				400	9	5.75	44055	LU400/40	S51	12		24000+	51000	45000	2100	22	Clear		111
E21	E27	O	U	70	6.3	4.13	10405	LU70/90/27		12		24000+	6000	5400	1900	22	Clear		111
ED23.5	E40	O	U	150	7.75	5	44044	LU150/55/40	S55	12		24000+	16000	14400	2000	22	Clear		111
E25	E40	O	U	1000	15.06	8.75	44059	LU1000/40	S52	6		24000+	140000	126000	2100	22	Clear		111
ED28	E40	O	U	150	9.13	5.24	27228	LU150/100/D/40		12		24000+	14000	12600	2000	22	Diffuse		111
							27226	LU250/D/40	S50	12		24000+	26000	23400	2100	22	Clear		111
ED37	E40	O	U	400	11.31	7	27229	LU400/D/40	S51	6		24000+	47500	42750	2100	22	Diffuse		111
T14.5	E40	O	U	150	8.23	5.16	27223	LU150/100/40		12		24000+	15000	13500	2000	22	Clear		111

# High Intensity Discharge Lamps



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes Warning
<b>EXPORT LAMPS (CONTINUED)</b>																		
<b>E-Z LUX® LUCALOX® HIGH PRESURE SODIUM (MERCURY RETROFIT)</b>																		
ED28	E40	0	U	215	9	5	49941	LUH215/D/EZ/40		12		12000	20200	18600	1900	22	↔ Diffuse, Energy-Saving Retrofit for 250W Mercury	111
<b>MERCURY</b>																		
ED37	E40	0	U	400	11.42	7.13	32294	HR400DX33/40	H33	6		24000+	22600	14400	3900	50	Deluxe White	113

## FOOTNOTES

### # Footnote

- 9 Do not use this lamp in fixtures designed for less than rated lamp wattage.
- 14 Life shown is for vertical  $\pm 15^\circ$  operation.
- 16 Approximate lumen ratings at  $45^\circ$  burning position: Initial - 145,000. Mean - 124,000.
- 17 Rated life based on 5 or more burning hours per start.
- 28 Use only 1000-watt H12 or H34-type ballasts. Do not use on 1000-watt H36-type ballasts.
- 32 Lamp will run at 400-watts when used on a linear reactor ballast.
- 33 Rated life based on 11 hours per start.
- 38 Requires a non-ANSI designated ballast with a special, add-on metal halide ignitor. Contact your local GE Representative for a list of approved ballasts and ignitors.
- 39 UV Control is a quartz material that effectively cuts UVB and UVC radiation.
- 42 Approximate lumen ratings at  $45^\circ$  burning position: Initial - 153,000. Mean - 139,000.
- 43 When operated on a 120 hrs. cycle (minimum), lamp life rating may be extended by up to 50% based on engineering estimates.
- 44 Rated life based on 7 hours per start
- 45 Use electronic ballast, peak lead ballast, or system which can shut itself off if ballast overheating occurs.
- 46 Use only with the following types of H39 175-watt mercury ballasts: high-reactance lag-type autotransformers or 240-volt and 277-volt reactors. Do not use with CW (lead-type) or CWA ballasts.
- 47 Use only with the following types of H37 250-watt mercury ballasts: high-reactance lag-type autotransformers or 240-volt and 277-volt reactors. Do not use with CW (lead-type) or CWA ballasts.
- 48 Use only with the following types of H33 400-watt mercury ballasts: high-reactance lag-type autotransformers, reactors, CWA auto regulators or CW regulators.

## GENERAL INFORMATION

### FIXTURE REQUIREMENTS – LAMP ENCLOSURE TYPE

HID lamps have fixture requirements that must be followed. The following three codes identify the appropriate fixture for a particular lamp. Lamps having an “O” code can be operated in an “Open or Enclosed” fixture. Lamps with a “S” code can be used in open fixtures only if operated in a vertical  $\pm 15^\circ$  burn position. Lamps in all other burn positions must be suitably enclosed.

- O = Open or Enclosed Fixtures
- E = Enclosed Fixtures Only
- S = Lamps operated in a vertical position (Base Up or Down),  $\pm 15^\circ$ , can be used in an open fixture. Lamps burned in any other orientation must be used in “enclosed fixtures only”.

**Use in Enclosed Fixtures.** “Enclosed” fixture means a fixture suitably enclosed and designed to contain fragments of hot quartz or glass (up to  $1100^\circ\text{C}$ ) per UL Standard #1572 (if in doubt, contact your fixture manufacturer).

**Use In Open Fixtures.** For lamps operated in the vertical position  $\pm 15^\circ$  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.

### PROTECTION OF BULBS FROM MOISTURE

Outer bulbs of HID lamps are made of heat-resistant glass, designed to have strength and thermal-shock-resistant characteristics suitable for normal applications in typical luminaries. However, shielding of lamps must be provided to avoid bulb breakage that could result from direct contact with liquids (such as water) during operation.

### RATED LIFE

Values are based on laboratory tests of a large number of representative lamps under controlled conditions, including operation at 10 hours per start on ballasts having specified electrical characteristics. Individual lamps or groups of lamps may, of course, vary from the Rated Life shown. Lamp operating conditions can also affect life. Where Rated Life is less than 24,000 hours, it is a MEDIAN value of life expectancy; that is, the total operating time at which, under normal operating conditions, 50% of any large group of initially installed lamps is expected to be still burning. Where Rated Life is 24,000+ hours, 67% of lamps are expected to be still burning at 24,000 hours. For cost-of-light calculations involving these lamps, if an estimated operating time is required at which 50% of the lamps will still be burning, a value of 28,500 hours is suggested. At burning cycles shorter than 10 hours per start, the median life will be shortened as follows:

- 5 hrs/start: approx. life 75% of rating
- 2½ hrs/start: approx. life 56% of rating
- 1¼ hrs/start: approx. life 42% of rating

### LUMENS– LUMENS LISTED ARE REFERENCE LUMENS

Rated average lamp lumens are obtained under controlled laboratory conditions in a prescribed burning position. **Initial Reference Lumens** refer to the lamp lumen output after 100-hours burning. **Mean Reference Lumens** refer to the lamp lumen output at the mean lumen point during lamp life. The mean lumen point occurs at 50% rated life for HPS and mercury lamps, and at 40% rated life for metal halide lamps. Lamp performance on typical systems under typical service conditions will vary from the reference lumen ratings.

High Intensity Discharge lighting systems are subject to a wide range of variations which may affect final lighting levels. As a result, lamp



## GENERAL INFORMATION (CONTINUED)

performance on actual systems may vary due to lamp orientation, ambient temperatures, ballast variations, line voltage and other reasons. Care must be taken when choosing a system to consider how these changes can affect your light levels both initially and at the mean lumen point.

### BALLASTS

HID lamps (except E-Z-Merc®) require auxiliary ballast equipment designed to produce proper electrical values. Actual lamp watts may vary depending on ballast characteristics. For total system watts, add nominal ballast watts.

All Lucalox®, Mercury, and Metal Halide lamps (except I-Line) will start at ambient temperatures of -22°F (-30°C). I-Line Multi-Vapor® will start at ambient temperatures of 5°F (-15°C) when used on approved mercury ballasts.

### START CHARACTERISTICS

Full light output does not occur immediately when power is applied. Instead, there is a time delay for the lamp to reach 90% total light output. The starting delay for High Pressure Sodium is 3-4 minutes, for Metal Halide 2-5 minutes, and for Mercury 5-7 minutes.

### RESTART CHARACTERISTICS

With a power interruption of a half cycle or more, the arc will extinguish. When power is immediately reapplied, full light output does not occur immediately. For HPS lamps there is a delay of 1 minute to reach 90% total light output; however, Lucalox® LU1000 requires 2 minutes and E-Z Lux® lamps require 3 minutes to reach 90% total light output. For most Metal Halide lamps, including CMH®, when the power is immediately reapplied, there will be a delay of 10 to 15 minutes before the lamps reach the 90% light output level. PulseArc® lamps restrike in <4 minutes. The restart delay for mercury lamps is 3 to 6 minutes to reach 90% total light output.

## OPERATING NOTES

### E-Z LUX® LAMPS

These high pressure sodium lamps should be operated only on certain mercury ballasts, as indicated below.

LUH110/EZ: use only with the following types of 125-watt mercury ballasts: high-reactance lag-type autotransformers or 220-volt or greater reactors.

LUH150/EZ: use only with the following types of H39 175-watt mercury ballasts: high-reactance lag-type autotransformers or 240-volt and 277-volt reactors. Do not use with CW (lead-type) or CWA ballasts.

LUH215/EZ: use only with the following types of H37 250-watt mercury ballasts: high reactance lag-type autotransformers or 240-volt and 277-volt reactors. Do not use with CW (lead-type) or CWA ballasts.

LUH360/EZ: use only with the following types of H33 400-watt mercury ballasts: high-reactance lag-type autotransformers, reactors, CWA auto regulators or CW regulators.

### OPERATING POSITIONS AND CODES

Mercury and High Pressure Sodium lamps may be operated in any burn position and will still maintain their rated performance specifications. Metal Halide and Low Pressure Sodium lamps, however, are optimized for performance in specific burn positions, or may be restricted to certain burn positions for safety reasons.

- U = Universal burning position
- HBU = Horizontal -15° to Base Up
- HBD = Horizontal +15° to Base Down
- HOR = Horizontal ±15°
- H45 = Horizontal to ±45° only
- VBU = Vertical Base Up ±15°
- VBD = Vertical Base Down ±15°

If no special burn position is noted, the burn position is universal.

### HID COLOR

The color temperature and CRI listed in the tabular data are for reference purposes only. All high intensity discharge lamps exhibit some degree of lamp to lamp color variation and shift over life. These characteristics can be increased based on choice of fixture, ballast, burning position, and ambient conditions. Color variation can be greater than normal during the initial 100 hours of burning. Where color consistency is important, consider using ConstantColor® CMH® for better performance (page 3-9). Contact your local GE Lighting representative for more information.

### EXPORT BASE LAMPS (/27 AND /40)

Export only lamps have a non-domestic (non-U.S.) base and are not intended for use in the United States due to potential shock hazard. The lamps are identified by "/27" or "/40" at the end of the lamp description and comply with electrical characteristics defined by IEC standards.

### MXR32 METAL HALIDE LAMP AND ELECTRONIC BALLAST

MXR32 lamps must be operated on GE Lighting's special, high power factor electronic ballast, HAL32/120. Outside dimensions for the ballast are 9¼" long, 3⅛" wide and 1¼" high.

### SAF-T-GARD® MULTI-VAPOR® AND SAF-T-GARD® MERCURY LAMPS

Caution: If the outer glass envelope of a Saf-T-Gard® lamp is broken, the arc tube will self-extinguish, but the supporting structure will still be electrically connected. Be sure power is off and the lamp has cooled before removing the lamp to avoid possible electrical shock from contact with the arc tube support and to avoid risk of burn from the hot arc tube.

### ARCSTREAM® METAL HALIDE LAMPS

Arcstream® tubular-shaped lamps must be used in suitably-enclosed fixtures with UV-absorbing cover glass. Enclosed fixtures must be capable of containing fragments of hot quartz or glass (up to 1100°C) in the unusual event of the outer bulb shattering. Also see complete Warning and Caution Notices on metal halide lamps.



## WARNING NOTICES

**THE FOLLOWING WARNING NOTICES MUST BE COMPLIED WITH TO HELP AVOID POSSIBLE LAMP RUPTURE.** General Electric Company will not be responsible for poor lamp performance, personal injury or property damage resulting from failure to follow these instructions.

### HID LAMPS - GENERAL

#### WARNING

Most HID lamps are constructed of an outer bulb with an internal arc tube made of quartz. The arc tube operates under high pressure at very high temperatures - as high as approximately 1100°C. The arc tube and outer bulb may unexpectedly rupture due to internal causes or external factors such as a system failure or misapplication.

An arc tube rupture can burst and shatter the outer glass bulb resulting in the discharge of glass fragments and extremely hot quartz particles (as high as 1100°C). There is a risk of personal injury, property damage, burns and fire.

Some lamps are position-sensitive and must only be operated in specified burning positions (see "Additional Information" column in this catalog) with compatible electrical equipment in the types of fixtures prescribed in "Lamp Enclosure Type" on Page 3-22 of this catalog.

In addition to the general warnings above, there are specific warnings for the HID lamp types listed below.

#### Metal Halide Lamps

Fixture lens/diffuser material must be able to contain fragments of hot quartz or glass (up to 1100°C). If you do not know whether your fixture can safely withstand an arc tube rupture, contact your fixture manufacturer.

In continuously-operating systems (24 hours/day, 7 days/week), turn lamps off once per week for at least 15 minutes. **FAILURE TO COMPLY INCREASES THE RISK OF RUPTURE.**

Relamp fixtures at or before the end of rated life. Beyond rated life, light output diminishes while energy consumption and risk of rupture increase.

#### High Pressure Sodium Lamps

This is a vacuum jacket lamp and may implode if broken. As a precaution, wear safety glasses and gloves when installing or removing lamp. High pressure sodium lamps are not position-sensitive and may be operated in any burning position.

#### Mercury Lamps

Fixture lens/diffuser material must be able to contain fragments of hot quartz or glass (up to 1100°C). If you do not know whether your fixture can safely withstand an arc tube rupture, contact your fixture manufacturer.

Relamp fixtures at or before the end of rated life. Beyond rated life, light output diminishes while energy consumption and risk of rupture increase.

Mercury lamps are not position-sensitive and may be operated in any burning position.

#### Low Pressure Sodium Lamps

These lamps contain sodium which will ignite when exposed to water. If lamps are not disposed of properly, there is a risk of fire in the disposal vessel. Consult GE for disposal instructions.

#### LAMP ENCLOSURE TYPE

Use in Enclosed Fixtures. "Enclosed" fixture means a fixture suitably enclosed and designed to contain fragments of hot quartz or glass (up to 1100°C) in accordance with UL Standard #1572 (if in doubt, contact your fixture manufacturer).

Use In Open Fixtures. For lamps operated in the vertical position  $\pm 15^\circ$  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.

#### IMPORTANT NOTICE

In accordance to Federal Regulations (21 CFR 1040.30), the following notice applies to all lamps in the HID section of this catalog except High Pressure, Low Pressure Sodium Lamps, and Saf-T-Gard® Multi-Vapor Lamps.

"WARNING: This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured, and the arc tube continues to operate. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain types of lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available."

## WARNING AND CAUTION NOTICES

### 101 - Arcstream®

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use thermally protected ballast

##### Lamp emits UV radiation which may cause eye/skin injury

- Avoid exposure of eyes and skin to unshielded lamp

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use where directly exposed to water or outdoors without an enclosed fixture

- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp





## WARNING AND CAUTION NOTICES (CONTINUED)

### 102 - Arcstream® G12

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use thermally protected ballast

##### Lamp emits UV radiation which may cause eye/skin injury.

- Avoid exposure of eyes and skin to unshielded lamp

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp

### 103 - Arcstream® Rx7s

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use thermally protected ballast

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use in wet locations
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 104 - CMH® G12 and Mini

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use fused or thermally protected ballast - see instructions

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp



## WARNING AND CAUTION NOTICES (CONTINUED)

### 105 - CMH® HW HPS

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use electronic ballast, peak lead ballast, or system which can shut itself off if ballast overheating occurs

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 106 - CMH® HW PA

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use electronic ballast, peak lead ballast, or system which can shut itself off if ballast overheating occurs

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Do not store flammable materials near/below lamp

- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 107 - CMH® PAR20-30

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use fused or thermally protected ballast - see instructions

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken

### 108 - CMH® PAR38

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed



## WARNING AND CAUTION NOTICES (CONTINUED)

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken

### 109 - CMH® TD

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not use beyond rated life
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp

### 110 - Kolorarc

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken

- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 111 - Lucalox®

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### Contains sodium – chemical burn risk

- Avoid skin contact with broken pieces

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp



## WARNING AND CAUTION NOTICES (CONTINUED)

### 112 - Lucalox® HO

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use fused or thermally protected ballast - see instructions

##### Contains sodium – chemical burn risk

- Avoid skin contact with broken pieces

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 113 - Mercury

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 114 - Mercury Saf-T-Gard®

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 115 - Mercury Self-Ballasted

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed



## WARNING AND CAUTION NOTICES (CONTINUED)

### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 116 - QMH E-rated Kr85 and CMH

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not use beyond rated life
- If used on a dimming system, see instructions.
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 117 - QMH HOR Enclosed

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast

- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not use beyond rated life
- Do not remove base locating pin if so equipped
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 118 - QMH LW

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp



## WARNING AND CAUTION NOTICES (CONTINUED)

### 119 - QMH Protected

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- If used on a dimming system, see instructions.
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 120 - QMH Protected Kr85

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 121 - QMH S-rated

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product — see instructions
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- If used on a dimming system, see instructions.
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 122 - QMH S-rated Kr85

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.



## WARNING AND CAUTION NOTICES (CONTINUED)

### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product — see instructions
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- If used on a dimming system, see instructions.
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 123 - QMH S-rated Saf-T-Gard®

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product — see instructions
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 124 - Sport 1000W PAR64

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling Lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp



## WARNING AND CAUTION NOTICES (CONTINUED)

### 125 - Sport MBIL-CSI-CID

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### Lamp emits UV radiation which may cause eye/skin injury.

- Avoid exposure of eyes and skin to unshielded lamp

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use where directly exposed to water or outdoors without an enclosed fixture

- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp

## HID LAMPS CROSS REFERENCE

GE Description	Osram/Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>STANDARD AND ECOLUX® HPS LAMPS</b>		
Lucalox®	Lumalux®	Ceramalux™
LU35/MED	LU35/MED	C35S76/M
LU35/D/MED	LU35/D/MED	C35S76/D/M
LU50/MED	LU50/MED	C50S68/M
LU50/D/MED	LU50/D/MED	C50S68/M
LU50	LU50/ECO	C50S68/ALTO
LU50/D	LU50/D	C50S68/D
LU70/MED	LU70/MED	C70S62/M
LU70/D/MED	LU70/D/MED	C70S62/D/M
LU70/ECO	LU70/ECO	C70S62/ALTO
LU70/ECO/NC	LU70/PLUS/ECO	—
LU70/D	LU70/D	C70S62/D
LU100/MED	LU100/MED	C100S54/M
LU100/D/MED	LU100/D/MED	C100S54/D/M
LU100/ECO	LU100/ECO	C100S54/ALTO
LU100/ECO/NC	LU100/PLUS/ECO	—
LU100/D	LU100/D	C100S54/D
LU150/MED	LU150/55/MED	CC150S55/M
LU150/D/MED	LU150/55/D/MED	C150S55/D/M
LU150/55/ECO	LU150/55/ECO	C150S55/ALTO
LU150/ECO/NC	LU150/55/PLUS/ECO	—
LU150/55/D	LU150/55/D	C150S55/D
LU150/100	LU150/100	C150S56/ALTO
LU200/ECO	LU200/ECO	C200S66
LU200/ECO/NC	LU200/PLUS/ECO	—
LU250/ECO	LU250/ECO	C250S50
LU250/ECO/NC	LU250/PLUS/ECO	—
LU250/D	LU250/D	C250S50/D

GE Description	Osram/Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>STANDARD AND ECOLUX® HPS LAMPS (CONTINUED)</b>		
Lucalox®	Lumalux®	Ceramalux™
LU310	LU310/ECO	C310S67
LU400/ECO	LU400/ECO	C400S51
LU400/ECO/NC	LU400/PLUS/ECO	—
LU400/D	LU400/D	C400S51/D
LU750	LU750	—
LU1000/ECO	LU1000	C1000S52
<b>DELUXE HIGH PRESSURE SODIUM LAMPS</b>		
Lucalox®		Ceramalux
LU70/DX/MED	—	C70S62/C/M
LU150/DX/MED	—	C150S55/C/M
LU150/55/DX	—	C150S55/C
LU250/DX	—	C250S50/C
LU400/DX	—	C400S51/C
<b>STANDBY LONGLIFE HIGH PRESSURE SODIUM LAMPS</b>		
Lucalox®	Lumalux®	Ceramalux™
LU70/SBY/XL	LU70/SBY	C70S62/2
LU100/SBY/XL	LU100/SBY	C100S54/2
LU150/55/SBY/XL	LU150/551SBY	C150S55/2
LU200/SBY/XL	LU200/100/SBY	—
LU250/SBY/XL	LU250/SBY	C250S50/2
LU400/SBY/XL	LU400/SBY	C400S51/2
LU1000/SBY/XL	LU1000/SBY	C1000S52/2
<b>EZ-LUX® HIGH PRESSURE SODIUM LAMPS</b>		
E-Z LUX®	Unalux®	Ceramalux™
LUH150/EZ	ULX150	C150S63 RETROLUX
LUH215/EZ	UIX215	C215S675 RETROLUX
LUH360/EZ	ULX360	C360S64 RETROLUX





## HID LAMPS CROSS REFERENCE (CONTINUED)

GE Description	Osram/Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>CERAMIC METAL HALIDE LAMPS</b>		
CMH39/PAR20/830/SP10	MCP39PAR20/U/830/SP	CDM35/PAR20/M/SP
CMH39/PAR20/830/FL30	MCP39PAR20/U/830/FL	CDM35/PAR20/M/FL
CMH39/PAR30L/830/SP10	MCP39PAR30LN/U/830/SP	CDM35/PAR30L/M/SP
CMH39/PAR30L/830/SP15	—	—
CMH39/PAR30L/830/FL25	MCP39PAR30LN/U/830/FL	CDM35/PAR30L/M/FL
CMH70/PAR30L/830/SP15	MCP70PAR30LN/U/830/SP	CDM70/PAR30L/M/SP
CMH70/PAR30L/830/FL40	MCP70PAR30LN/U/830/FL	CDM70/PAR30L/M/FL
CMH70/PAR38/830/SP15	MCP70PAR38/U/830/SP	CDM70/PAR38/SP/3K
CMH70/PAR38/830/FL25	MCP70PAR38/U/830/FL	CDM70/PAR38/FL/3K
CMH70/PAR38/830/WFL	MCP70PAR38/U/830/WFL	CDM70/PAR38/WFL/3K
CMH100/PAR38/830/SP15	MCP100PAR38/U/830/SP	CDM100/PAR38/SP/3K
CMH100/PAR38/830/FL25	MCP100PAR38/U/830/FL	CDM100/PAR38/FL/3K
CMH100/PAR38/830/WFL	MCP100PAR38/U/830/WFL	CDM100/PAR38/WFL/3K
CMH70/U/830/MED	MCP70/U/MED/830	MHC70/U/M/3K
CMH70/C/U/830/MED	MCP70/C/U/MED/830	MHC70/C/U/M/3K
CMH100/U/830/MED	MCP100/U/MED/830	MHC100/U/M/3K
CMH100/C/U/830/MED	MCP100/C/U/MED/830	MHC100/C/U/M/3K
CMH39/T/U/830/G12	MC39T6/U/G12/830	CDM35/T6/830
CMH70/T/U/830/G12	MC70T6/U/G12/830	CDM70/T6/830
CMH70/T/U/942/G12	MC70T6/U/G12/940	CDM70/T6/942
CMH150/T/U/830/G12	MC150T6/U/G12/830	CDM150/T6/830
CMH150/T/U/942/G12	MC150T6/U/G12/940	CDM150/T6/942
CMH70/TD/830/Rx7s	MC70T6/DE/830	CDM70/TD/830
CMH70/TD/942/Rx7s	—	CDM70/TD/942
CMH150/TD/830/Rx7s	MC150T6/DE/830	CDM150/TD/830
CMH150/TD/942/Rx7s	—	CDM150/TD/942
CMH20/TC/U/830/G8.5	—	—
CMH39/TC/U/830/G8.5	MC39TC/U/G8.5/830	CDM35/TC/830
CMH70/TC/U/830/G8.5	MC70TC/U/G8.5/830	CDM70/TC/830
<b>MULTI-VAPOR® PULSEARC® METAL HALIDE LAMPS</b>		
MXR32C/VBU	—	—
MXR50/U/MED	MP50/U/MED	MH50/U/M
MXR50/C/U/MED	MP50/C/U/MED	MH50/C/U/M
MVR50/U/MED	M50/U	MH50/U/M
MVR50/C/U/MED	M50/C/U	MH50/C/U/M
MXR70/U/MED	MH70/U/MED	MH70/U/M
MXR70/C/U/MED	MH70/C/U/MED	MH70/C/U/M
MXR70/U/MED/O	MP70/U/MED	MP70/U/M
MXR70/C/U/MED/O	MP70/C/U/MED	MP70/C/U/M
MXR100/U/MED	M100/U/MRD	MH100/U/M
MXR100/C/U/MED	MH100/C/U/MED	MH100/C/U/M
MVR100/U/MED	MH100/U/4K/MED	—
MVR100/C/U/MED	—	—
MXR100/U/MED/O	MP100/U/MED	—
MXR100/C/U/MED/O	MP100/C/U/MED	—

GE Description	Osram/Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>MULTI-VAPOR® PULSEARC® METAL HALIDE LAMPS (CONTINUED)</b>		
MXR150/U/MED	M150/U/MED	MH150/U/M
MXR150/C/U/MED	M150/C/U/MED	MH150/C/U/M
MVR175/VBU/PA	—	MS175/BU/PS
MVR175/C/VBU/PA	—	—
MVR250/VBU/PA	MS250/PS/BU	MS250/BU/PS
MVR250/C/VBU/PA	MS250/C/PS/BU	—
MVR320/VBU/HO/PA	MS320/PS/BU	MS320/BU/PS
MVR320/C/VBU/HO/PA	MS320/C/PS/BU-HOR	MS320/C/BU/PS
MVR320/VBU/XHO/PA	MP320/350/PS/BU	—
MVR320/C/VBU/XHO/PA	MP320/350/C/PS/BU	—
MVR350/VBU/PA	MP320/350/PS/BU	—
MVR350/C/VBU/PA	MP320/350/C/PS/BU	—
MVR400/VBU/XHO/PA	MP350/400/PS/BU	—
MVR400/C/VBU/XHO/PA	MP350/400/C/PS/BU	—
MVR750/VBU/PA	MS750/PS/BU-HOR/BT37	—
MVR750/C/VBU/PA	MS750/C/PS/BU-HOR/BT37	—
MVR1000/BT37/PA	—	MS1000/BU/BT37/PS
<b>MULTI-VAPOR® STANDARD METAL HALIDE LAMPS</b>		
MVR175/U/MED	M175/U/MED	MH175/U/M
MVR175/C/U/MED	M175/C/U/MED	MH175/C/U/M
MVR175/U	M175/U	MH175/U
MVR175/C/U	M175/C/U	MH175/C/U
MVR175/HOR	MS175/HOR	MS175/HOR
MVR175/C/HOR	MS175/C/HOR	MS175/C/HOR
MVR250/U	M250/U	MH250/U
MVR250/C/U	M250/C/U	MH250/C/U
MVR250/SP30/U	—	—
MVR250/HOR	MS250/HOR	MS250/HOR
MVR250/C/HOR	MS250/C/HOR	MS250/C/HOR
MVR400/U	M400/U	MH400/U
MVR400/C/U	M400/C/U	MH400/C/U
MVR400/SP30/U	—	MH400/3K/U
MVR400/VBU	MS400/BU	MS400/BU
MVR400/VBD	MS400/BD	—
MVR400/C/VBU	MS400/C/BU	MS400/C/BU&
MVR400/C/VBD	MS400/C/BD	—
MVR400/HOR	MS400/HOR	MS400/HOR
MVR400/C/HOR	MS400/C/HOR	MS400/C/HOR
MVR400/SP30/HOR	MS400/3K/HOR	—
MVR400/U	—	MP400/U
MVR400/VBU	MP400/BU/BD	—
MVR1000/U	M1000/U	MH1000/U
MVR1000/C/U	M1000/C/U	MH1000/C/U
MVR1000/VBU	MS1000/BU	MS1000/BU
MVR1000/VBU/O	MP1000/BU	—
MVR1500/U/SPORTS	M1500/BU-HOR	MH1500BU



## HID LAMPS CROSS REFERENCE (CONTINUED)

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>DOUBLE-ENDED LAMPS</b>		
ARC70/TD/730/R7S	HQI-DE70/WDX	CDM70/TD/830
ARC70/TD/743/R7S	—	MHN70/TD/840
ARC150/TD/730/R7S	HQI-DE150/WDX	CDM150/TD/830
ARC150/TD/742/R7S	HQI-DE150/NDX	MHN150/TD/840
<b>SAFETY METAL HALIDE LAMPS</b>		
MVT400/VBU	MPT400/BU	MHT400/U
MVT400/C/VBU	MPT400/C/BU	MHT400/C/U
<b>MERCURY VAPOR LAMPS</b>		
HR40/50DX45-46	H45/46DL-40/50/DX	H46DL-40-50/DX
HR75DX43	H43AV-75/DX	H43AV-75/DX
HR75/100PFL43-44	—	—
HR100DX38/E17	—	—
HR100A38/A23	—	—
HR100DX38/A23	H38AV-100/DX	H38MP-100/DX
HR100A38	H38HT-100	H38HT-100
HR100DX38	H38JA-100/DX	H38JA-100/DX
HT100DX38	H38JA-T100/DX	H38JA-T100/DX
HR100WDX38	H38JA-100/N	—
HR100RFL38	—	—
HR100RDXFL38	H38BP-100/DX	H38BP-100/DX
HR100PSP44	H44GS-100	H44GS-100
HR100PFL44	H44JM-100	—
HR175A39	H39KB-175	H39KB-175
HR175DX39	H39KC-175/DX	H39KC-175/DX
HT175DX39	H39KC-T175/DX	H39KC-T175
HR175WDX39	H39KC-175/N	—
HR175RFL39	—	H39BM-175
HR175RDXFL39	H39BP-175/DX	H39BP-175/DX
HR250A37	H37KB-250	H37KB-250
HR250DX37	H37KC-250/DX	H37KC-250/DX
HT250DX37	H37KC-T250/DX	H37KC-T250/DX
HR250WDX37	H37KC-250/N	—

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>MERCURY VAPOR LAMPS (CONTINUED)</b>		
HR400A33	H33CD-400	H33CD-400
HR400DX33	H33GL-400/DX	H33GL-400/DX
HR400DX33BT	—	—
HT400DX33	H33GL-T400/DX	H33GL-T400/DX
HR400WDX33	H33GL-400/N	—
HR400R33	—	—
HR400RDX33	—	H33DN-400/DX
HR400RDXFL33	—	H33FS-400/DX
HR400RSP33	—	—
HR400A33/T16	H33AR-400	—
HR700DX35	—	H35ND-700/DX
HR1000DX34	H34GV-1000	—
HR1000DX34	H34GW-1000/DX	H34GW-1000/DX
HR1000A36	H36GV-1000	H36GV-1000
HR1000DX36	H36GW-1000/DX	H36GW-1000/DX
HT1000DX36	H36GW-T1000/DX	H36GW-T1000/DX
<b>SELF-BALLASTED MERCURY VAPOR LAMPS</b>		
HSB160/M	—	—
HSB250	—	S250E28/DX
HSB250/M	—	S250E28/DX/M
HSB450	—	S450BT37/C
HSB750R/120	—	S750R57