



**CLEAR ACRYLIC**



**SOFT-GLO™ ACRYLIC**

**USE 20% LESS FIXTURES**

# **HID WAREHOUSE LIGHTING**

**Enviroguard™ Family**

# **GUTH®**

**LIGHTING FOR DEMANDING ENVIRONMENTS**

# WAREHOUSE LIGHTING

## OVERVIEW

Enviroguard fixtures are ideal for warehouse and distribution center applications.

1. Uses up to 20% less fixtures and energy
2. Optics allow 3 to 1 spacing
3. Optional Soft-Glo™ reflector dramatically reduces direct glare
4. Available in 450 watt Metal Halide with 25" reflector
5. Suitable for 15'-35' mounting
6. Available with "HERS" Hi-Lo HID dimming system
7. Optical system designed for vertical illumination
8. Five year limited warranty
9. Optional encapsulated ballast ensures quiet operation
10. 4-UP free trial program



## WAREHOUSE ILLUMINATION

The majority of critical visual tasks in a warehouse occur on a vertical plane. Lighting the vertical surfaces of stored goods is essential. Illumination should be distributed over the entire vertical seeing surface from top to bottom and along the entire length of storage aisles.

Horizontal illumination must be adequate for reading pick lists, safety and navigation. To assure a productive work environment, glare from HID light sources should be minimized. This is particularly important for operators located beneath luminaires while looking at the top of the stacks. (Excerpt from *Illuminating Engineering Society Handbook*)



Guth's optics are optimized for warehouse applications. They provide up to 26% more vertical task illumination at 3 to 1 spacing.

## WAREHOUSE STORE ILLUMINATION

Customers applaud stores with glare free illumination, crisp white color and low noise. It helps them to identify product, make correct choices and minimize shopping time. Guth's optics provide higher vertical illumination for retail applications. Optional encapsulated ballasts eliminate fixture noise. Soft-Glo™ acrylic reduces glare.



Warehouse store.

## LAMPS

Clear Pulse Start Metal Halide provides the highest maintained lumens and crisp white light. Lamp characteristics are:

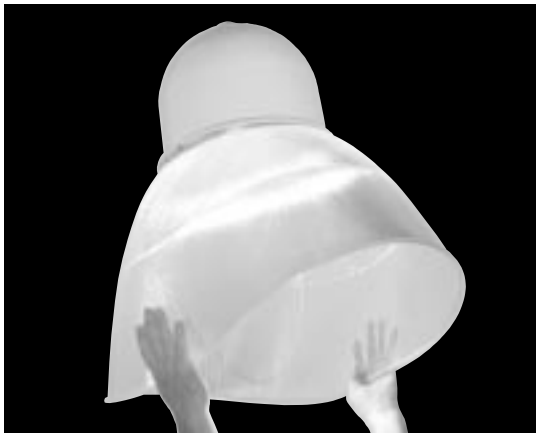
Lamp Type	Watts	Color	CRI	Lumens	Position	Life	Restrike
Clear Pulse Start MH	400	White	65	44,000	Base Up	20K+	2-4 Min
Clear Pulse Start MH	450	White	65	50,000	Base Up	20K+	2-4 Min

Refer to manufacturer's catalogues for more extensive data.

# GUTH LIGHTING SYSTEM

## HERS: HI-LO ENERGY REDUCTION SYSTEM

Significant energy savings are available in medium and low activity warehouse areas. Guth's HERS system automatically operates the fixture at half power when an area is unoccupied. Infrared sensors switch the lamps to full brightness almost instantly when activity returns. HERS is available in easy to install plug and play designs or the more conventional low voltage daisy chain system. HERS will not harm lamps and is approved by all lamp manufacturers. See brochure for more details.



High impact acrylic resists breakage.



Non-yellowing acrylic drop lens.

## WAREHOUSE OPTICAL SOLUTIONS

### 1. Enclosed Soft-Glo™ Acrylic

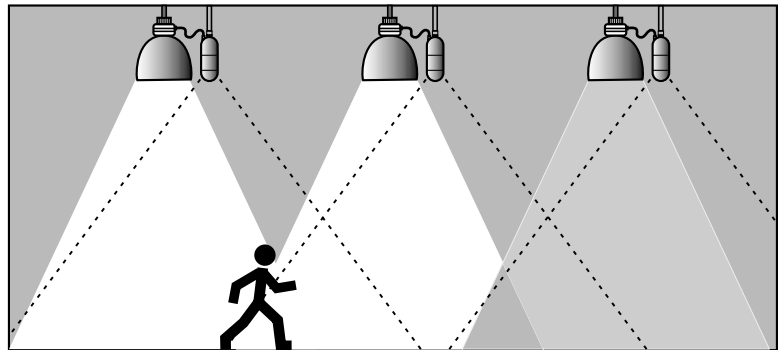
A premium optical system that reduces direct glare by half with almost no loss in efficiency. Fixture may be open or enclosed. Up-light enhances visibility and the feeling of natural open environment.

Fixture Height	Stack Height	Aisle Width	Spacing	Lamp	Vertical Average	Minimum Vertical at 20'	Horizontal Average
24'	20'	6'	60'	400 MH	21 fc	3.6 fc	13.5 fc
24'	20'	8'	60'	400 MH	20 fc	3.7 fc	12.5 fc

### 2. Enclosed Clear Acrylic

Prismatic elements and blondel flutes reduce lamp brightness from below and the side. Photometrics provide high vertical illumination at 3 to 1 spacing. Up-light enhances the feeling of openness.

Fixture Type	Fixture Height	Stack Height	Aisle Width	Spacing	Lamp	Vertical Average	Min. Vertical at 20'	Horizontal Average
Guth	24'	20'	6'	60'	400 MH	21.5 fc	3.6 fc	14 fc
Guth	24'	20'	8'	60'	400 MH	20.1 fc	4.1 fc	14 fc



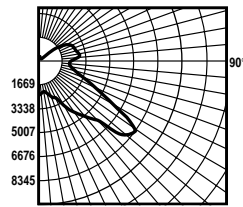
HERS is easy to install and reduces energy cost up to 35%.

# WAREHOUSE LIGHTING SYSTEM

## PHOTOMETRICS

### Coefficients of Utilization 400 W Clear MH 22" Enclosed Acrylic ELP-E2-41 400M

Ceiling Refl.	80%			50%			10%		
Wall Refl.	50	30	10	50	30	10	50	30	10
RCR	20% Effective Floor Cavity Reflectance								
0	1.06	1.06	1.06	.89	.89	.89	.70	.70	.70
1	.89	.84	.80	.74	.71	.68	.58	.56	.54
2	.75	.68	.62	.63	.58	.53	.49	.45	.42
3	.65	.56	.50	.54	.48	.43	.42	.38	.34
4	.56	.47	.40	.47	.40	.34	.36	.31	.28
5	.48	.39	.32	.40	.33	.27	.30	.25	.22
6	.42	.32	.26	.34	.27	.22	.26	.21	.17
7	.36	.28	.21	.30	.23	.18	.22	.18	.14
8	.32	.24	.18	.26	.20	.15	.20	.15	.11
9	.28	.20	.15	.23	.17	.12	.17	.12	.09
10	.26	.18	.13	.21	.15	.10	.15	.11	.07

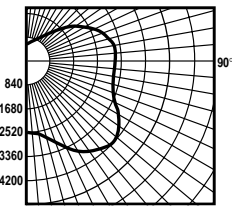


Report No.  
10337

Total Lamp Lumens 40,000  
Fixture Efficiency 94.8%

### Coefficients of Utilization 400 W Clear MH 22" Soft-Glo™ Enclosed Acrylic ELP-E2-31 400M

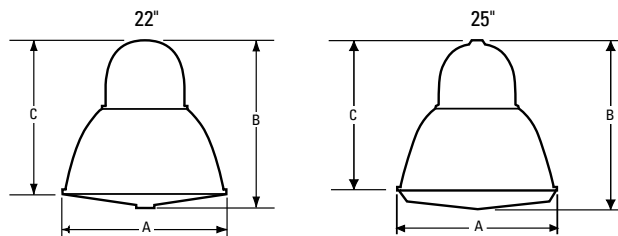
Ceiling Refl.	80%			50%			10%		
Wall Refl.	50	30	10	50	30	10	50	30	10
RCR	20% Effective Floor Cavity Reflectance								
0	1.01	1.01	1.01	.82	.82	.82	.60	.60	.60
1	.83	.78	.73	.67	.63	.60	.48	.46	.44
2	.70	.63	.57	.56	.51	.46	.40	.37	.34
3	.61	.52	.46	.48	.42	.38	.34	.31	.27
4	.53	.44	.38	.42	.36	.31	.30	.26	.23
5	.46	.37	.31	.37	.30	.25	.26	.22	.18
6	.41	.32	.26	.32	.26	.21	.23	.19	.15
7	.36	.28	.22	.29	.23	.18	.20	.16	.13
8	.32	.24	.19	.26	.20	.15	.18	.14	.11
9	.29	.21	.16	.23	.17	.13	.16	.12	.09
10	.26	.19	.14	.21	.15	.11	.15	.11	.08



Report No.  
11390

Total Lamp Lumens 40,000  
Fixture Efficiency 92.0%

## DIMENSIONS



REFL. DIA	DIM. A	DIM. B	DIM. C
22"	22 1/4"	24"	22"
25"	25 3/8"	25 3/4"	23"

## OPTIONS

### Electrical

- "/SSF" – Slow Blow Fuse – Fluorescent and HID
- "/HERS-G1" – Bi-Level Dimming Ballast, Low Voltage Daisy Chain System, consult factory
- "/HERS-G2" – Bi-Level Dimming Ballast, Plug-n-Play Integrated System, consult factory
- "/PB" – Potted and Encapsulated Low Noise Ballast, consult factory for 450 MH

### Mountings

- "/LHCP-120" – Loop Hanger, 6' White Cord and NEMA 5-15 Molded Plug
- "/LHCP-277" – Loop Hanger, 6' White Cord and NEMA L11-15 Twist Lock Plug
- "/LH-PT" – Loop Hanger Cord Set with 3' Pigtails
- "/JB" – J-Box Kit (fixture mounts 5" from ceiling)

### Safety

- "/ISL" – Instant Standby 150 Watt Quartz
- "/DISL" – Delay Instant Standby 150 Watt Quartz
- "/IE" – Emergency Quartz Socket 120V Only
- "/WG" – Wire Guard

## ORDERING INFORMATION

**ELP - O**     **2**     -     **3**     **1**     **400P**     **M**

**SERIES**  
ELP – Prismatic Acrylic

**ENCLOSURE**  
E – Enclosed Damp  
O – Open Damp

**SIZE**  
2 – 22"  
5 – 25" (450MH)

**REFLECTOR**  
3 – Soft Glo™ Acrylic  
4 – Clear Acrylic  
6 – Hi-Impact Acrylic

**BALLAST COVER TYPE**  
1 – White Aluminum  
2 – Anodized Aluminum

**VOLTAGE**  
1 – 120  
2 – 277  
3 – 347  
M – Multi-HID

**LAMP WATTAGE**  
250M – 250 Watt MH  
250P – 250 Pulse Start MH  
350P – 350 Pulse Start MH  
400M – 400 Watt MH  
400P – 400 Pulse Start MH  
450P – 450 Pulse Start MH (25" Reflector)  
400H – 400 Watt HPS

### Note:

- Pendent fixture requires 9" clearance to lift ballast cover for wiring. For close mounting, use cord and plug or J-box kit.

### Metal Halide Note:

- Lamp manufacturers state "type E and S type lamps must be turned off for 15 minutes each week to prevent a non-passive failure"
- Type O rated lamps have no turn-off requirement. An optional pink socket will only accept O rated lamps.

