## DESCRIPTION

The Halo H800E Compact Fluorescent housing offers high performance with two 13W horizontally mounted, electronic ballasted, Double Twin Tube, 4-Pin compact fluorescent lamps.

## APPLICATION

For non-insulated ceilings. Insulation must be kept 3" from housing on all sides and top.

| | | |
|---|---|---|
| **Catalog #** | | **Type** |
| **Project** | | |
| **Comments** | | **Date** |
| **Prepared by** | | |

## DESIGN FEATURES

A ···**Reflector**

.040 spun aluminum with clear specular Alzak® reflector. Choice of Albalite, Drop Opal or Fresnel lens trims secured with torsion springs.

B ···**Plaster Frame**

Precision die stamped steel frame. Bar Hanger brackets on four sides. Trim supports adjust 3/4" to accommodate different ceiling thicknesses.

C ···**Junction Box**

Listed for eight #12AWG (four in, four out) 90°C conductors feed through branch wiring. Five 1/2" and two 3/4" knockouts. Access to junction box and ballast from below ceiling is by removing reflector.

D ···**Bar Hangers**

Two piece bar hangers accommodate joist spacing up to 24". Bar hangers can be repositioned 90° to simplify clearance for wiring.

E ···**Socket**

Socket assembly for two 13 watt Double Twin (Quad) Tube (DTT), 4-Pin, Compact Fluorescent Lamps. Base Type: G 24Q-1, Lamp Type: CFQ13W/G 24q.

F ···**Integral Ballast**

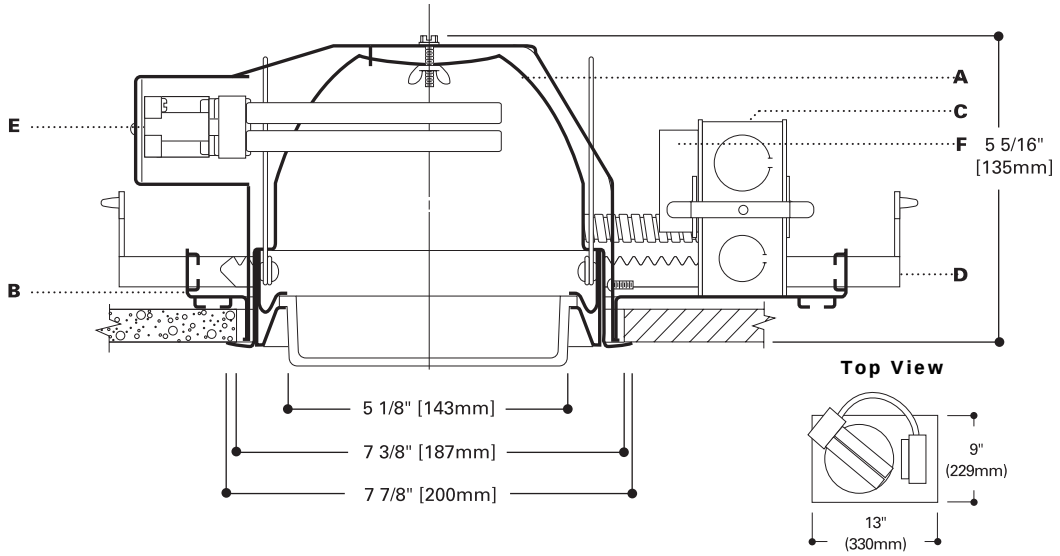
H800E.....120V-277V Universal Voltage Electronic Ballast

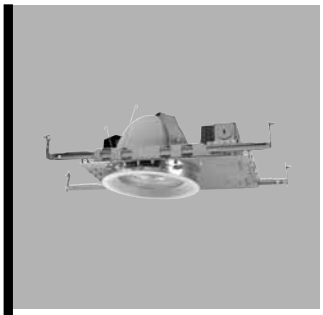
H800E347.....347V Electronic Ballast

Features: High Power Factor, Low THD. For (2) 13 watt DTT (Quad Tube) Compact Fluorescent Lamps.

**Labels**

U.L. listed
CSA Certified
Standard Damp Label
Listed for Feed Through



# H800E
# H800E347

**13W DTT**
**ELECTRONIC BALLAST**

**8" DOWNLIGHT**

**ALBALITE LENS**
**DROP OPAL LENS**
**FRESNEL LENS**

### Energy Data

**H800E**
**(2) 13W DTT, 4-Pin CFL**
Lamp Type: CFQ13W/G 24q
Ballast: 120V to 277V Electronic, Universal Voltage
Input Watts: 32W
120V Line Amps: 0.27A
277V Line Amps: 0.12A
Power Factor: >98%
Ballast Factor: 0.98
Min Start Temp: -0°F/-18°C
THD: <10%
Sound Rating: A
EMI/RFI: FCC 47CFR Part 18 Non-Consumer

**H800E347**
**(2) 13W DTT, 4-Pin CFL**
Lamp Type: CFQ13W/G 24q
Ballast: 347V Electronic
347V Input Watts: 33
347V Line Amps: 0.10A
Power Factor: >98%
Ballast Factor: 0.98
Min Start Temp: -0°F/-18°C
THD: <10%
Sound Rating: A
EMI/RFI: FCC 47CFR Part 18 Non-Consumer

**NOTES:**
Housing shown with trim and lamp for reference only. Housing and trim must be ordered separately. Lamp not included unless otherwise stated.

Alzak is a registered trademark of Aluminum Company of America.

## ORDERING INFORMATION

**SAMPLE NUMBER:H800E-800P**

Complete unit consists of housing and trim (ordered separately).

**Housing**

**H800E**=(2) 13W, 120V-277V, Electronic Ballast, CFL
**H800E347**=(2) 13W, 347V, Electronic Ballast, CFL

**Trims**

**800P**=Albalite Lens - Wet Location listed
**801P**=Drop Opal Lens - Wet Location listed
**803P**=Fresnel Lens - Wet Location listed


**800P**


**803P**


**801P**

## PHOTOMETRICS

### Candlepower Distribution

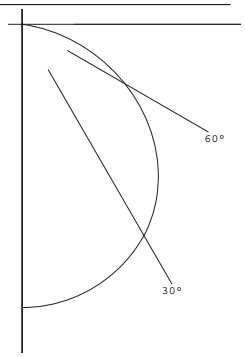
Test No. H23483

**H800E-800P**

**Albalite Glass Lens Trim**

Lamp=Two 13W Four Pin Quad Tube Lumens=900 each

Spacing Criterion=1.3




Efficiency=20.5%

### Candlepower

| Deg. | CD |
|---|---|
| 0 | 134 |
| 5 | 134 |
| 15 | 129 |
| 25 | 121 |
| 35 | 109 |
| 45 | 91 |
| 55 | 69 |
| 65 | 44 |
| 75 | 18 |
| 85 | 2 |
| 90 | 0 |

### Cone of Light

| Distance to Illuminated Plane | Initial Nadir Footcandles | Beam Diameter |
|---|---|---|
| 4'0" | 8 | 5'0" |
| 6'0" | 4 | 7'5" |
| 7'0" | 3 | 9'0" |
| 8'0" | 2 | 10'0" |
| 10'0" | 1 | 13'0" |

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.

Footcandle values are initial, apply appropriate light loss factors where necessary.

### Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|---|---|---|---|
| 0-30 | 105 | 5.8 | 28.5 |
| 0-40 | 173 | 9.6 | 46.9 |
| 0-60 | 304 | 16.9 | 82.5 |
| 0-90 | 369 | 20.5 | 100.0 |
| 90-180 | 0 | 0.0 | 0.0 |
| 0-180 | 369 | 20.5 | 100.0 |

### Coefficient of Utilization

| rc | 80% | | 70% | | 50% | |
|---|---|---|---|---|---|---|
| rw | 50 | 30 | 50 | 30 | 50 | 30 |
| RCR | | | | | | |
| 0 | 24 | 24 | 24 | 24 | 23 | 23 |
| 1 | 22 | 21 | 21 | 20 | 20 | 20 |
| 2 | 19 | 18 | 19 | 17 | 18 | 17 |
| 3 | 17 | 15 | 16 | 15 | 16 | 14 |
| 4 | 15 | 13 | 14 | 13 | 14 | 13 |
| 5 | 13 | 11 | 13 | 11 | 13 | 11 |
| 6 | 12 | 10 | 12 | 10 | 11 | 10 |
| 7 | 11 | 9 | 11 | 9 | 10 | 9 |
| 8 | 10 | 8 | 10 | 8 | 9 | 8 |
| 9 | 9 | 7 | 9 | 7 | 9 | 7 |
| 10 | 8 | 7 | 8 | 7 | 8 | 7 |

rc=Ceiling reflectance, rw=Wall reflectance, RCR=Room cavity ratio . CU Data Based on 20% Effective Floor Cavity Reflectance.

### Candlepower Distribution

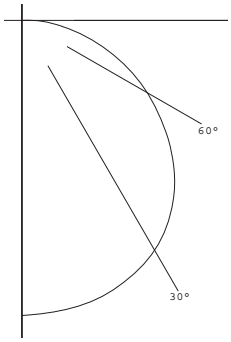
Test No. H23479

**H800E-801P**

**Drop Opal Glass Lens**

Lamp=Two 13W Four Pin Quad Tube Lumens=900 each

Spacing Criterion=1.3




Efficiency=24.7%

### Candlepower

| Deg. | CD |
|---|---|
| 0 | 140 |
| 5 | 139 |
| 15 | 137 |
| 25 | 130 |
| 35 | 119 |
| 45 | 102 |
| 55 | 80 |
| 65 | 57 |
| 75 | 33 |
| 85 | 13 |
| 90 | 0 |

### Cone of Light

| Distance to Illuminated Plane | Initial Nadir Footcandles | Beam Diameter |
|---|---|---|
| 4'0" | 9 | 5'5" |
| 6'0" | 4 | 8'0" |
| 7'0" | 3 | 9'5" |
| 8'0" | 2 | 10'5" |
| 10'0" | 1 | 13'5" |

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.

Footcandle values are initial, apply appropriate light loss factors where necessary.

### Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|---|---|---|---|
| 0-30 | 112 | 6.2 | 25.2 |
| 0-40 | 187 | 10.4 | 42.1 |
| 0-60 | 337 | 18.7 | 76.0 |
| 0-90 | 444 | 24.7 | 100.0 |
| 90-180 | 0 | 0.0 | 0.0 |
| 0-180 | 444 | 24.7 | 100.0 |

### Coefficient of Utilization

| rc | 80% | | 70% | | 50% | |
|---|---|---|---|---|---|---|
| rw | 50 | 30 | 50 | 30 | 50 | 30 |
| RCR | | | | | | |
| 0 | 29 | 29 | 29 | 29 | 27 | 27 |
| 1 | 25 | 24 | 25 | 24 | 24 | 23 |
| 2 | 22 | 20 | 21 | 20 | 21 | 19 |
| 3 | 19 | 17 | 19 | 17 | 18 | 16 |
| 4 | 17 | 15 | 17 | 15 | 16 | 14 |
| 5 | 15 | 13 | 15 | 13 | 14 | 12 |
| 6 | 14 | 11 | 13 | 11 | 13 | 11 |
| 7 | 12 | 10 | 12 | 10 | 12 | 10 |
| 8 | 11 | 9 | 11 | 9 | 11 | 9 |
| 9 | 10 | 8 | 10 | 8 | 10 | 8 |
| 10 | 9 | 7 | 9 | 7 | 9 | 7 |

rc=Ceiling reflectance, rw=Wall reflectance, RCR=Room cavity ratio . CU Data Based on 20% Effective Floor Cavity Reflectance.

### Candlepower Distribution

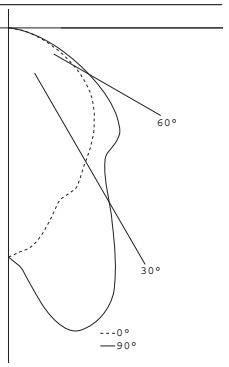
Test No. H23484

**H800E-803P**

**Fresnel Glass Lens**

Lamp=Two 13W Four Pin Quad Tube Lumens=900 each

Spacing Criterion=1.0




Efficiency=31.3%

### Candlepower

| Deg. | CD | |
|---|---|---|
| | 0° | 90° |
| 0 | 217 | 217 |
| 5 | 210 | 245 |
| 15 | 175 | 293 |
| 25 | 159 | 239 |
| 35 | 136 | 159 |
| 45 | 115 | 147 |
| 55 | 88 | 114 |
| 65 | 54 | 64 |
| 75 | 24 | 26 |
| 85 | 4 | 3 |
| 90 | 0 | 0 |

### Cone of Light

| Distance to Illuminated Plane | Initial Nadir Footcandles | Beam Diameter |
|---|---|---|
| 4'0" | 17 | 4'0" |
| 6'0" | 8 | 5'5" |
| 7'0" | 6 | 6'5" |
| 8'0" | 4 | 7'5" |
| 10'0" | 3 | 9'5" |

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.

Footcandle values are initial, apply appropriate light loss factors where necessary.

### Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|---|---|---|---|
| 0-30 | 196 | 10.9 | 34.8 |
| 0-40 | 297 | 16.5 | 52.7 |
| 0-60 | 480 | 26.7 | 85.2 |
| 0-90 | 564 | 31.3 | 100.0 |
| 90-180 | 0 | 0.0 | 0.0 |
| 0-180 | 564 | 31.3 | 100.0 |

### Coefficient of Utilization

| rc | 80% | | 70% | | 50% | |
|---|---|---|---|---|---|---|
| rw | 50 | 30 | 50 | 30 | 50 | 30 |
| RCR | | | | | | |
| 0 | 37 | 37 | 36 | 36 | 35 | 35 |
| 1 | 33 | 32 | 32 | 31 | 31 | 30 |
| 2 | 29 | 27 | 29 | 27 | 28 | 26 |
| 3 | 26 | 24 | 26 | 23 | 25 | 23 |
| 4 | 23 | 21 | 23 | 20 | 22 | 20 |
| 5 | 21 | 18 | 21 | 18 | 20 | 18 |
| 6 | 19 | 16 | 19 | 16 | 18 | 16 |
| 7 | 17 | 15 | 17 | 15 | 17 | 14 |
| 8 | 16 | 13 | 16 | 13 | 15 | 13 |
| 9 | 15 | 12 | 14 | 12 | 14 | 12 |
| 10 | 14 | 11 | 13 | 11 | 13 | 11 |

rc=Ceiling reflectance, rw=Wall reflectance, RCR=Room cavity ratio . CU Data Based on 20% Effective Floor Cavity Reflectance.