

# R7406

**Directional**  
**39-70-150W T-6 Metal Halide**  
**7 1/4" Conoid Aperture**

### Optics and Applications

The parabolic cone is designed for low brightness performance even at maximum angulation. Use to highlight display objects or for straight downlighting in sloped ceilings.

### Design Features

A steel housing protects all internal components. Angulation from 0° to 30° by quick macro adjustment, then minute focusing with a threaded turnbuckle. Full 360° rotation. All positions lock securely. The lamp is always oriented to the center of the cone regardless of tilt or rotation. Maximum ceiling thickness 2". Top or bottom service.

### Finish

A specular clear Alzak cone is standard. Optional colors and Softglow® finishes are available. Housing and structural parts are painted optical matte black to suppress stray light leaks.

### Ballast

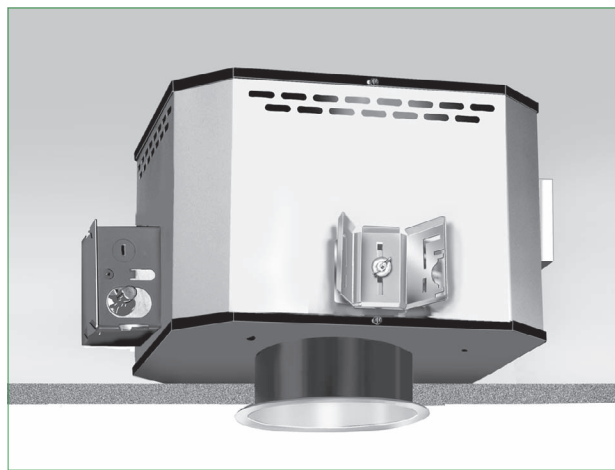
Electronic metal halide ballasts provide more constant lumen and wattage output. They feature thermal protection with auto reset, fast restrike, quiet operation and automatic shutdown at end of life. Supplied standard for 39 or 70W. Specify EBH5 for 150W model.

### General

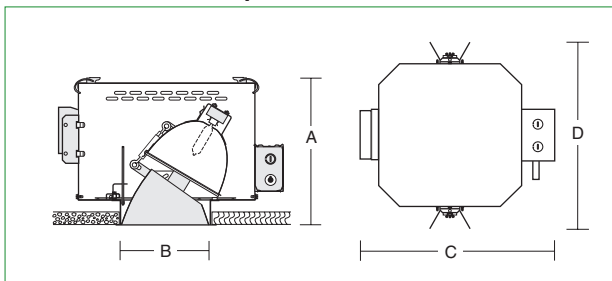
Fixtures are pre-wired and thermally protected, UL and C-UL listed for eight wire 75°C branch circuit wiring. Union made IBEW. Luminaire Efficiency Ratings (LER) do not apply to directional fixtures.

### Accessories

- R2 26" support rails. WT White trim flange.
  - R5 52" support rails. WHT White complete trim.
  - F Ballast fuse. TLI Emergency 60W lamp.
  - B Specular black cone. T Specular titanium cone.
  - G Specular gold cone. W Specular wheat cone.
  - H Specular mocha cone. Y Specular pewter cone.
  - P Specular graphite cone. Z Specular bronze cone.
  - S Softglow® finishes: add S before color letters. e.g. SW for Softglow® wheat cone, SC for Softglow® clear cone.
  - V347 347 volt ballast, contact factory.
  - EBH5 Electronic ballast, 150W, specify volts.
  - EC Emergency circuit with mini-can socket and leads.\*
  - AOE1 Electronic ballast Auto-On restrike system 120V.\*
  - AOE2 Electronic ballast Auto-On restrike system 277V.\*
- \*Use open rated 60W max. auxiliary incandescent lamp.



### Dimensions and Lamps



Number	A Depth	B Aperture	C Width	D Length	Lamps*
R7406	12 1/2" 318mm	7 1/4" 184mm	17 1/2" 445mm	20 1/4" 514mm	39-70-150W T-6 Metal halide clear

\*To specify add watts and volts for proper ballast, e.g. R7406-39277.

### Matching Units

Straight downlight      Page R13  
 Wall washer              Page R35

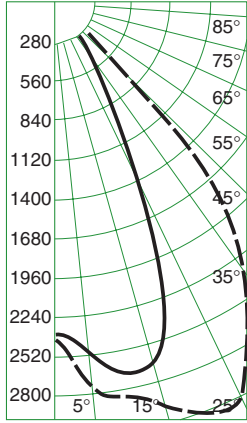
# R14 R7406

## Footcandle Values at Nadir

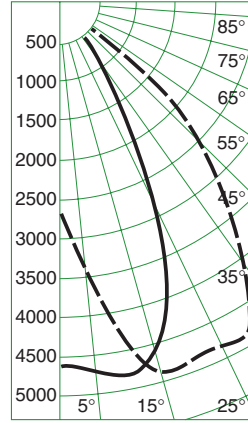
Distance	10'			15'			20'			25'											
	Nadir	10°	15°	Nadir	10°	15°	Nadir	10°	15°	Nadir	10°	15°									
Lamps	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam	FC	FC	Diam						
R7406 39W MH T-6 CL	24	26	4'	24	26	5'	11	12	5'	11	8'	6	6	7'	6	11'	4	4	9'	4	13'
R7406 70W MH T-6 CL	47	47	4'	44	44	5'	21	21	5'	19	8'	12	12	7'	11	11'	7	8	9'	7	13'
R7406 150W MH T-6 CL	106	104	4'	92	92	5'	47	46	5'	41	8'	26	26	7'	23	11'	17	17	9'	15	13'

See note 5.

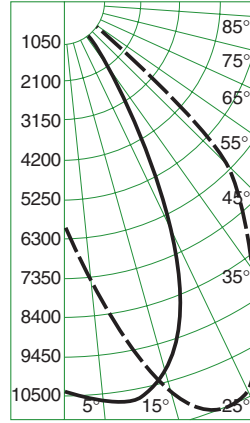
## Candlepower Distribution



R7406 39W T-6  
Eff. 62% S/M .91



R7406 70W T-6  
Eff. 61% S/M .90



R7406 150W T-6  
Eff. 61% S/M .88

## Candelas at Nadir

Vertical Angle	39W	70W	150W
	3200*	6200*	13500*
0	2365	4670	10575
5	2476	4766	10759
10	2720	4947	10874
15	2668	4861	10203
20	2221	4185	8667
25	1501	2974	6332
30	893	1773	3912
35	398	794	1790
40	162	330	749
45	54	111	252
50	14	28	61
55	3	6	13
60	0	4	8
65	0	0	0
70	0	0	0
75	0	0	0
80	0	0	0
85	0	0	0
90	0	0	0

o Vertical Angles

\* Initial Lamp Lumens, Clear

## Brightness

Number	Lamps	85°	75°	65°	55°	45°
R7406	39W T-6 MH Clear	8	16	32	68	178
	70W T-6 MH Clear	11	26	44	103	247
	150W T-6 MH Clear	21	63	124	271	608

Data in footlamberts. Photometer readings, Maximum Brightness Method. See note 6.  
Data collected with lamps tilted 25°.

## Notes

- 1 Data on all charts calculated using a clear specular cone.
- 2 Specular colored cone multipliers coated lamps: Wheat x .96, Pewter x .92, Mocha x .93, Graphite x .92, Titanium x .92, Bronze x .86, Black x .68.
- 3 Softglow® cone multipliers: Clear x .95, Gold x .92, Wheat x .91, Pewter x .88, Mocha x .86, Graphite x .85, Titanium x .84, Bronze x .77, Black x .64.
- 4 Candlepower distribution curves: solid lines show horizontal distribution at nadir, dotted lines show horizontal distribution at 25° lamp tilt.
- 5 Degree headings are measured from one side of nadir. Diameter data includes both sides. Therefore the 10° column describes a total 20° pattern diameter above the floor. Footcandle values are at the diameter edge. Values are determined with lamp tilt at 0°. Angulation changes all data.
- 6 Brightness data from the Average Luminance Method are inaccurate for downlights. They are theoretical calculations for large surfaces such as troffer lenses. We recommend the stricter standard of Maximum Brightness Method point data from direct photometer readings. They approximate what the human eye perceives when evaluating glare. For more information refer to Z section brochure Z1.