

DESCRIPTION

Recessed lens downlight with 6 inch aperture with vertical T4 GU6.5 ceramic metal halide lamp. Available in narrow, medium and wide distributions. Fixture is suitable for commercial construction. Insulation must be kept 3" from top and sides of housing. Two stage reflector system produces smooth distribution with excellent light control and low aperture brightness.

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

SPECIFICATION FEATURES

Mechanical Housing

Steel housing encloses optical system protecting reflectors from damage. Tool-less top access allows service from above. Access door allows splice inspection and ballast service through aperture.

Plaster Frame/Collar

Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2".

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above the ceiling.

Junction Box

(6) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (12) #12 AWG (six in, six out) 90°C conductors and feed thru branch wiring.

Fasteners

All fasteners that must be routinely loosened or tighten for installation and or maintenance are to be captive.

Re-lamp

Suitable for top or bottom lamp replacement. A lockout feature prevents the lamp socket from being installed in the incorrect beam distribution position during service.

Optical Upper Reflector

Clear anodized spun 0.050" thick aluminum produces narrow, medium and wide distribution based on selected lamp center position.

Lower Shielding Reflector

Hydro-formed 0.050" thick aluminum parabolic contour provides 50° lens and lens image cutoff. Self flanged standard with optional white painted flange. Also available with polymer flange. Available in all standard Alzak® finishes.

Shielding

0.125" thick diffuse glass lens masks arc tube support wire image, striations and color demixing common with uncoated ceramic arc sources. Lens is captive during lamp replacement.

Trim Retention

Upper and lower reflectors are held securely together and are retained with two torsion springs holding the flange tightly to the finished ceiling surface.

Electrical

Pulse rated GU6.5 ceramic lamp socket attaches to upper reflector with three-position bracket and precisely maintains lamp center.

Insulation Detector

Self resetting detector opens circuit if insulation is improperly installed.

Ballast

Universal input 120/277V electronic ballast provides noise free operation, improved efficiency and increase lamp life as compared with magnetic ballast. Regulated output power over a wide range of ANSI lamp voltages results in excellent color stability over time.

Quartz Lamp Re-strike Time Delay System (Q Option)

Internal auxiliary 100W DC bayonet base T4 quartz lamp (included) provides low level illumination in the event of a momentary power interruption.

Emergency Circuit Lamp (X Option)

Emergency circuit lamp module for 100W DC bayonet base T4 quartz lamp (included) by emergency circuit.

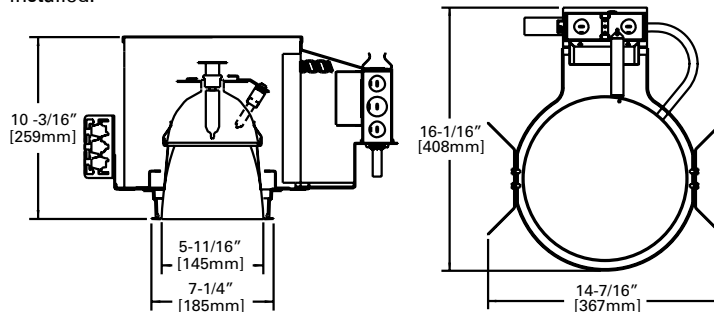
Code Compliance

Thermally protected and cULus listed for protected wet locations. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 non-consumer limits.



MD620T4G65 MD639T6G65

Ceramic Metal
Halide Lens
Downlight
6" Aperture



ENERGY DATA

Lamp: 20W MH
 Input Watts: 26W
 Max Current: 120V- 0.22A, 277V-0.11A
 Power Factor:>95% T.H.D.:<15%
 Min Starting Temperature: 5°F (-15°C)

Lamp: 39W MH
 Input Watts: 120V-46W, 277V-45W
 Max Current: 120V 0.39A, 277V-0.18A
 Power Factor:>95% T.H.D.:<15%
 Min Starting Temperature: -20°F (-30°C)

ORDERING INFORMATION

SAMPLE #: MD639T4G65-EQ

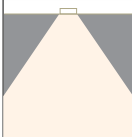
| Housing | Lamp Type/Wattage | Ballast | Options | Trim | Finish | Options | Accessories |
|---|--|--|--|---|---|--|-------------|
| MD6 = 6" Aperture MD6CP = 6" Aperture Chicago Plenum | 20T4G65 = 20W T4G6.5 CMH lamp 39T4G65 = 39W T4G6.5 CMH lamp | E ¹ = Electronic, UNV 120/277V 50/60 Hz 1E = Electronic, 120V 50/60 Hz 2E = Electronic, 277V 50/60 Hz 3E ¹ = Electronic, 347V 50/60 Hz Q ¹ = Quartz Restrike System X = Emergency Circuit Lamp | 6950 = Reflector assembly with white polymer trim ring 6950X = Reflector assembly with white polymer trim ring, accepts quartz standby lamp 6951 = Reflector assembly, self flanged 6951X = Reflector assembly, self flanged, accepts quartz standby lamp | LI=Low Iridescent Clear H=Clear Haze WMH=Warm Haze G=Gold WH=Wheat GP=Graphite GPH=Graphite Haze K=Cognac KH=Cognac Haze B=Black W=Gloss White | WF = White painted flange (self-flanged only) | HB26= L Channel Bar Hangers, 26" Long, Pair HB50= L Channel Bar Hangers, 50" Long, Pair RMB22= Wood Joist Bar Hangers, 22" Long, Pair HSA6= Slope Adapter for 6" Aperture Housings; Specify slope TRM6= Metal Trim Ring, White TRR6= Rimless Trim Ring, White FK= Field Installable fuse Kit; Specify Amperage | |

Notes: 1 Available with 39 watt only.

Photometric Results

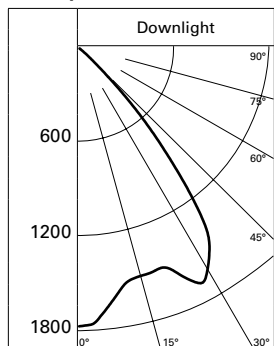
Spacing Criterion = 1.2
Efficiency = 72.0%

Test No. P11610
MD639T4G65E 6951LI
Lamp = CMH39/T4/GU6.5
Lumens = 3400
Wide Distribution



39W
T4

Candlepower Distribution



Cone of Light

| Distance Fixture to Lighted Plane | Initial Footcandles at Nadir | Beam Diameter |
|-----------------------------------|------------------------------|---------------|
| 8'0" | 28 | 1'6" |
| 10'0" | 18 | 13'0" |
| 12'0" | 12 | 16'0" |
| 15'0" | 8 | 20'0" |
| 20'0" | 4 | 26'0" |

Candelas

| Vertical Angle | CD |
|----------------|------|
| 0 | 1770 |
| 5 | 1699 |
| 15 | 1502 |
| 25 | 1613 |
| 35 | 1432 |
| 45 | 309 |
| 55 | 3 |
| 65 | 1 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

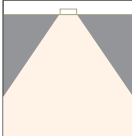
Zonal Lumens Summary

| Zone | Lumens | % Lamp | % Luminaire |
|--------|--------|--------|-------------|
| 0-30 | 1331 | 39.1 | 54.3 |
| 0-40 | 2177 | 64 | 88.9 |
| 0-60 | 2448 | 72 | 99.9 |
| 0-90 | 2449 | 72 | 100 |
| 90-180 | 0 | 0 | 0 |
| 0-180 | 2449 | 72 | 100 |

Photometric Results

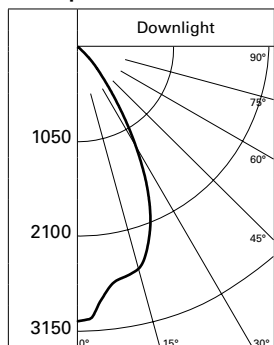
Spacing Criterion = 0.9
Efficiency = 73.4%

Test No. P11611
MD639T4G65E 6951LI
Lamp = CMH39/T4/GU6.5
Lumens = 3400
Medium Distribution



39W
T4

Candlepower Distribution



Cone of Light

| Distance Fixture to Lighted Plane | Initial Footcandles at Nadir | Beam Diameter |
|-----------------------------------|------------------------------|---------------|
| 8'0" | 47 | 7'0" |
| 10'0" | 30 | 9'0" |
| 12'0" | 21 | 11'0" |
| 15'0" | 14 | 13'6" |
| 20'0" | 8 | 18'0" |

Candelas

| Vertical Angle | CD |
|----------------|------|
| 0 | 3038 |
| 5 | 2836 |
| 15 | 2559 |
| 25 | 1898 |
| 35 | 800 |
| 45 | 196 |
| 55 | 2 |
| 65 | 1 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

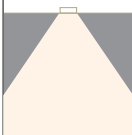
Zonal Lumens Summary

| Zone | Lumens | % Lamp | % Luminaire |
|--------|--------|--------|-------------|
| 0-30 | 1839 | 54.1 | 73.7 |
| 0-40 | 2346 | 69 | 94.1 |
| 0-60 | 2493 | 73.3 | 100 |
| 0-90 | 2494 | 73.4 | 100 |
| 90-180 | 0 | 0 | 0 |
| 0-180 | 2494 | 73.4 | 100 |

Photometric Results

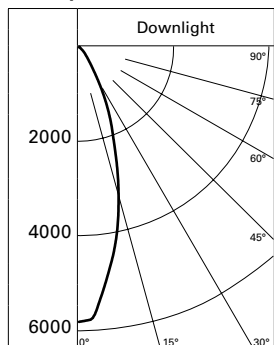
Spacing Criterion = 0.6
Efficiency = 73.1%

Test No. P11612
MD639T4G65E 6951LI
Lamp = CMH39/T4/GU6.5
Lumens = 3400
Narrow Distribution



39W
T4

Candlepower Distribution



Cone of Light

| Distance Fixture to Lighted Plane | Initial Footcandles at Nadir | Beam Diameter |
|-----------------------------------|------------------------------|---------------|
| 10'0" | 59 | 5'6" |
| 12'0" | 41 | 6'6" |
| 15'0" | 26 | 8'6" |
| 20'0" | 15 | 11'0" |
| 25'0" | 9 | 13'0" |

Candelas

| Vertical Angle | CD |
|----------------|------|
| 0 | 5869 |
| 5 | 5396 |
| 15 | 3359 |
| 25 | 1543 |
| 35 | 424 |
| 45 | 129 |
| 55 | 1 |
| 65 | 1 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

Zonal Lumens Summary

| Zone | Lumens | % Lamp | % Luminaire |
|--------|--------|--------|-------------|
| 0-30 | 2118 | 62.3 | 85.2 |
| 0-40 | 2395 | 70.4 | 96.3 |
| 0-60 | 2486 | 73.1 | 100 |
| 0-90 | 2487 | 73.1 | 100 |
| 90-180 | 0 | 0 | 0 |
| 0-180 | 2487 | 73.1 | 100 |

20W Multiplier 0.48