

DESCRIPTION

Recessed lens downlight with 6 inch aperture with vertical T4/T6 G12 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 de-mixing 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 G12 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.



MD620T4G12
MD639T6G12
MD670T6G12
MD6150T6G12

Ceramic Metal
 Halide Lens
 Downlight
 6" Aperture

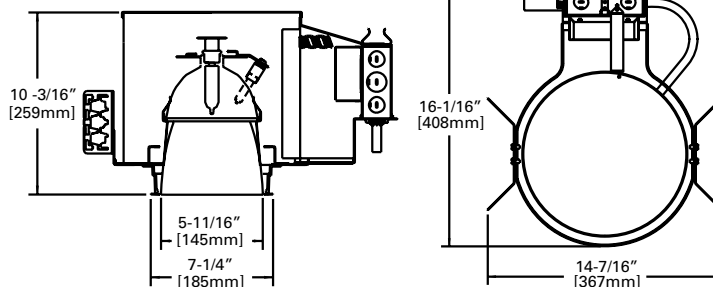
ENERGY DATA

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)

Lamp: 70W MH
 Input Watts: 120V-86W, 277V-84W
 Max Current: 120V-.72A, 277V-0.31A
 Power Factor:>90% T.H.D.:<16%
 Min Starting Temperature: -20°F (-30°C)

Lamp: 150W MH
 Input Watts: 120V-165W, 277V-161W
 Max Current: 120V-1.38A, 277V-.69A
 Power Factor:>90% T.H.D.:<10%
 Min Starting Temperature: -20°F (-30°C)



ORDERING INFORMATION

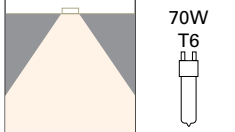
Housing	Lamp Type/Wattage	Ballast	Options	Trim	Finish	Options	Accessories
MD6 = 6" Aperture MD6CP = 6" Aperture Chicago Plenum	20T4G12 = 20W T4 G12 CMH lamp 39T6G12 = 39W T6 G12 CMH lamp 70T6G12 = 70W T6 G12 CMH lamp 150T6G12 = 150W T6 G12 CMH lamp	E ¹ = Electronic, UNV 120/277V 50/60 Hz 1E = Electronic, 120V 50/60 Hz 2E = Electronic, 277V 50/60 Hz 3E ² = Electronic, 347V 50/60 Hz	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 20, 39 and 70 watt only.
 2 Available with 39, 70 and 150 watt only.
 3 Not available with 20 watt.

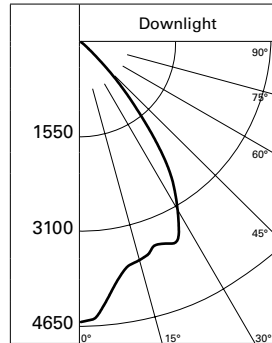
Photometric Results

Spacing Criterion = 1.0
Efficiency = 69.5%

Test No. P11622
MD670T6G12E-6951LI
Lamp = CMH70/T6/G12
Lumens = 7300
Wide Distribution



Candlepower Distribution



Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
8'0"	72	8'6"
10'0"	46	11'0"
12'0"	32	13'0"
15'0"	20	16'0"
20'0"	11	21'6"

Candelas

Vertical Angle	CD
0	4588
5	4332
15	3704
25	3638
35	2510
45	553
55	5
65	2
75	1
85	0
90	0

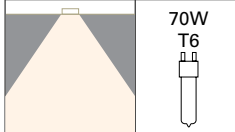
Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	3083	42.2	60.8
0-40	4598	63	90.7
0-60	5068	69.4	99.9
0-90	5071	69.5	100
90-180	0	0	0
0-180	5071	69.5	100

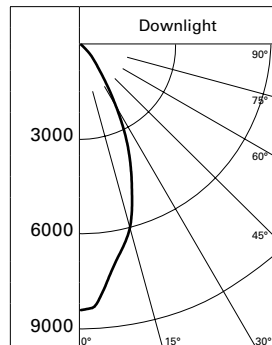
Photometric Results

Spacing Criterion = 0.7
Efficiency = 69.9%

Test No. P11623
MD670T6G12E-6951LI
Lamp = CMH70/T6/G12
Lumens = 7300
Medium Distribution



Candlepower Distribution



Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
8'0"	132	5'6"
10'0"	85	7'0"
12'0"	59	8'6"
15'0"	38	10'6"
20'0"	21	14'0"

Candelas

Vertical Angle	CD
0	8464
5	7943
15	6104
25	3625
35	1234
45	344
55	3
65	1
75	0
85	0
90	0

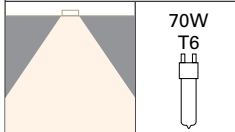
Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	4048	55.5	79.3
0-40	4848	66.4	95
0-60	5103	69.9	100
0-90	5104	69.9	100
90-180	0	0	0
0-180	5104	69.9	100

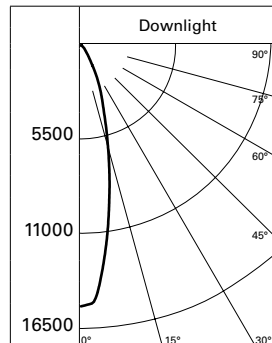
Photometric Results

Spacing Criterion = 0.5
Efficiency = 70.1%

Test No. P11624
MD670T6G12E-6951LI
Lamp = CMH70/T6/G12
Lumens = 7300
Narrow Distribution



Candlepower Distribution



Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
12'0"	111	5'6"
15'0"	71	7'0"
20'0"	40	9'0"
25'0"	26	11'6"
30'0"	18	13'6"

Candelas

Vertical Angle	CD
0	16040
5	14609
15	7058
25	2727
35	701
45	236
55	3
65	1
75	0
85	0
90	0

Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	4497	61.6	87.8
0-40	4957	67.9	96.8
0-60	5120	70.1	100
0-90	5121	70.1	100
90-180	0	0	0
0-180	5121	70.1	100

20W Multiplier	0.22
39W Multiplier	0.48
150W Multiplier	2.00