

DESCRIPTION

Recessed 6 inch aperture directional/slope for T4 G8.5 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

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 collar accommodates ceiling materials up to 1-1/2" thick.

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 tightened for installation and or maintenance are captive.

Relamp

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.

Adjustment Mechanism

Hot aiming rotates 365° tilts 40° and locks into position using #2 Phillips screwdriver. Center beam optics aligns axis of lamp with aperture as lamp translates from nadir thru 40°. Lamp aiming scale enables consistent settings across multiple fixtures.

Upper Reflector

Clear anodized spun 0.050" thick aluminum produces narrow (15°), medium (25°) and wide (40°) distribution based on selected lamp center position. Integral 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.

Lower Shielding Reflector

Angle cut 0.050" thick aluminum parabolic contour provides 50° cutoff. Torsion springs pull trim tight to ceiling. Reflector is keyed to prevent improper orientation relative to lamp. Available with optional clear lens to achieve wet location listing. Self flanged standard with optional white painted flange. Also available with polymer trim ring. Available in all Portfolio Alzak® finishes.

Socket

Pulse rated "Secure Fit" G8.5 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 increased 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.

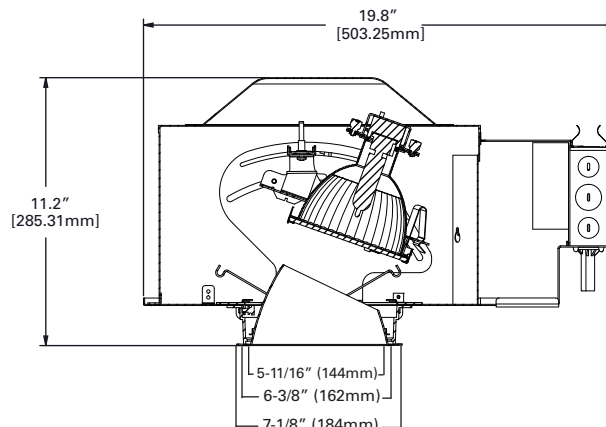


**MA620T4G85
MA639T4G85
MA670T4G85**

6470/6471

**Ceramic Metal Halide
T4 G8.5**

**6 Inch
Directional**



Energy Data	
20W	
120V Input Power: 26W	277V Input Power: 26W
120V Input Current: 0.22A	277V Input Current: 0.11A
Minimum Starting Temp: -15°C, +5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	
39W	
120V Input Power: 48W	277V Input Power: 47W
120V Input Current: 0.45A	277V Input Current: 0.18A
Minimum Starting Temp: -20°C, -5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	
70W	
120V Input Power: 86W	277V Input Power: 84W
120V Input Current: 0.72A	277V Input Current: 0.31A
Minimum Starting Temp: -20°C, -5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	

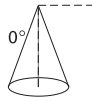
ORDERING INFORMATION

SAMPLE NUMBER: MA6NFL39T4G85EQ = 6" lens directional with Narrow Flood distribution and UNV 120/277V electronic ballast for a 39W T4 G8.5 CMH lar (Order Housing and Trim Separately)

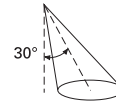
Housing	Distribution	Lamp Type / Wattage	Ballast	Options	Trims	Finish	Option	Accessories
<p>MA6 = 6" CMH directional/slope MA6CP = 6" CMH directional/slope, CCEA listed for City of Chicago plenum requirements</p> <p>SP = Spot NFL = Narrow Flood FL = Flood</p> <p>20T4G85 = 20W T4 G8.5 CMH lamp 39T4G85 = 39W T4 G8.5 CMH lamp 70T4G85 = 70W T4 G8.5 CMH lamp</p> <p>Notes: ¹ Not available with 20W.</p>		<p>E=Electronic, UNV 120/277V 50/60 Hz 1E=Electronic, 120V 50/60 Hz 2E=Electronic, 277V 50/60 Hz 3E=Electronic, 347V 50/60 Hz ¹</p> <p>Q=Quartz Re-strike ¹ System X=Emergency Circuit Lamp</p> <p>6470 = 6" angle cut reflector, white polymer trim ring 6471 = 6" angle cut reflector, self flanged</p>				<p>Alzak® Finishes LI=Specular clear, low iridescent H=Semi specular clear WMH=Warm Haze G=Gold WH=Wheat GP =Graphite GPH = Graphite Haze K=Cognac KH =Cognac Haze B=Black BB = Black Baffle WB= White Baffle</p>	<p>WF = White Painted Flanged (Self- flanged only) L1 = Clear lens</p> <p>HB26=Bar hanger, 26" long, pair HB50=Bar hanger, 50" long, pair RMB-22=Bar hanger for wooden joists, 22" long, pair TRM4*= Metal trim ring, specify finish TRR4 =Rimless trim ring FK*=Fuse kit, field installed, specify rating LSPOT= Selectively frosted glass lens (NSP distribution requires combination of SP and LSPOT.)</p>	

PHOTOMETRICS

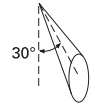
20W Multiplier	0.26
39W Multiplier	0.53



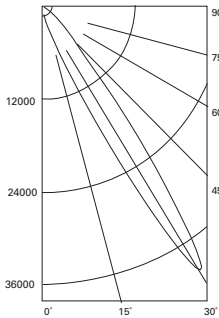
**0° Aiming Angle
Horizontal Luminance**



**30° Aiming Angle
Horizontal Luminance**



**30° Aiming Angle
Vertical Luminance**



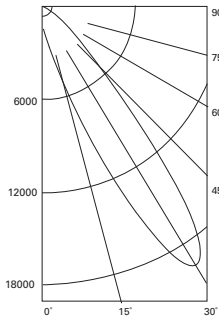
Narrow Spot
 Test No. P12230, P12232
MA6SP70T6E-6471LI
 T6 G12
 30° Beam
 Lumens=7300

Efficiency=56.7%

D	FC	Dia
13	224	2.9
15	168	3.4
17.5	124	4
20	95	4.5
25	61	5.6

D	FC	L	W	CB
13	149	3.5	3.1	7.5
15	112	4.1	3.6	8.7
17.5	82	4.8	4.2	10.1
20	63	5.4	4.8	11.5
25	40	6.8	6.0	14.5

D	FC	L	W	CB
5	215	3.6	2.0	8.7
6	150	4.3	2.4	10.4
8	84	5.7	3.2	13.9
10	54	7.1	4.0	17.3
12	37	8.5	4.8	20.8



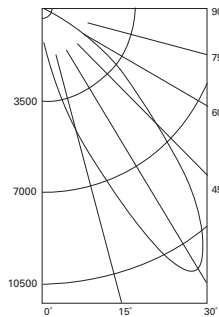
Spot
 Test No. P12229, P12231
MA6SP70T6E-6471LI
 T6 G12
 30° Beam
 Lumens=7300

Efficiency=58.9%

D	FC	Dia
13	110	4.8
15	83	5.6
17.5	61	6.5
20	47	7.5
25	30	9.3

D	FC	L	W	CB
13	78	5.9	5.1	7.5
15	59	6.8	5.9	8.7
17.5	43	7.9	6.9	10.1
20	33	9.0	7.9	11.5
25	21	11.3	9.9	14.5

D	FC	L	W	CB
5	122	5.0	3.0	8.7
6	84	6.1	3.6	10.4
8	47	8.1	4.8	13.9
10	30	10.1	6.0	17.3
12	21	12.1	7.2	20.8



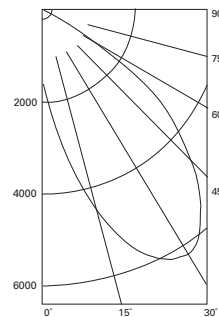
Narrow Flood
 Test No. P12226, P12225
MA6NFL70T6E-6471LI
 T6 G12
 30° Beam
 Lumens=7300

Efficiency=63.2%

D	FC	Dia
13	69.0	7
15	52.0	8
17.5	38.0	9.4
20	29.0	10.7
25	19.0	13.4

D	FC	L	W	CB
13	46	7.9	7.6	7.5
15	34	9.1	8.7	8.7
17.5	25	10.6	10.2	10.1
20	19	12.2	11.6	11.5
25	12	15.2	14.5	14.5

D	FC	L	W	CB
5	92	6.3	4.2	8.7
6	64	7.5	5.1	10.4
8	36	10.0	6.8	13.9
10	23	12.5	8.5	17.3
12	16	15.0	10.2	20.8



Flood
 Test No. P12227, P12228
MA6FL70T6E-6471LI
 T6 G12
 30° Beam
 Lumens=7300

Efficiency=63.6%

D	FC	Dia
13	45	9.6
15	34	11.1
17.5	25	12.9
20	19	14.8
25	12	18.5

D	FC	L	W	CB
13	29	10.2	10.9	7.5
15	22	11.8	12.5	8.7
17.5	16	13.8	14.6	10.1
20	12	15.8	16.7	11.5
25	8	19.7	20.9	14.5

D	FC	L	W	CB
5	71	5.3	5.6	8.7
6	49	6.4	6.7	10.4
8	28	8.6	9.0	13.9
10	18	10.7	11.2	17.3
12	12	12.8	13.5	20.8