

DESCRIPTION

Recessed 6 inch aperture directional/slope for 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

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 Philips 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 de-mixing 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 G12 ceramic lamp socket attaches to upper reflector and precisely maintains lamp center.

Insulation Detector

Self resetting detector opens circuit if insulation is improperly installed.

Ballast

Universal input (except 150 watt) 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.



MA620T4G12
MA639T6G12
MA670T6G12
MA6150T6G12

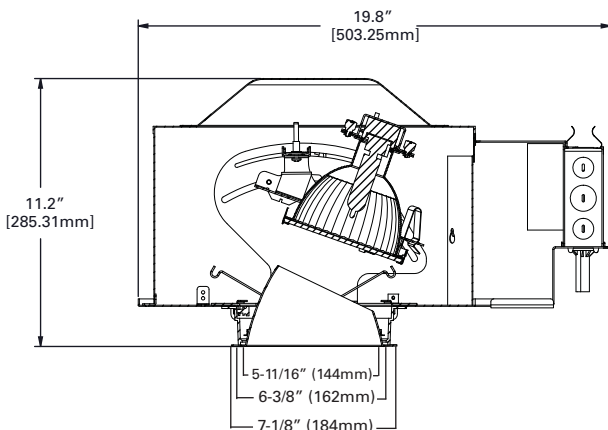
6470/6471

Ceramic Metal Halide

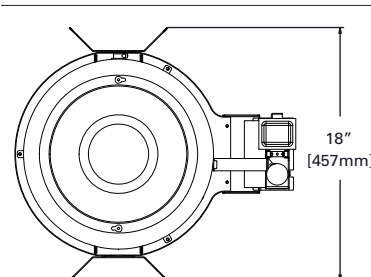
T4 G12

T6 G12

6 Inch
Directional



TOP VIEW



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	
150W	
120V Input Power: 165	277V Input Power: 161
120V Input Current: 1.38A	277V Input Current: 0.59A
Minimum Starting Temp: -30°C, -20°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	

ORDERING INFORMATION

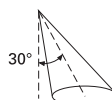
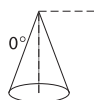
SAMPLE NUMBER: MA6FL39T6G12EQ = 6" lens directional with UNV 120/277V electronic ballast for a 39W T4 G8.5 CMH lamp, Flood Distribution, with quartz re-strike

Housing	Distribution	Lamp Type/ Wattage	Ballast	Options	Trim	Finish	Options	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>20T4G12 = 20W T4 G12 CMH lamp 39T6G12 = 39W T6 G12 CMH lamp 70T6G12 = 70W T6 G12 CMH lamp 150T6G12 = 150W T6 G12 CMH lamp</p>		<p>E = Electronic, UNV 120/277V ¹ 50/60Hz 1E = Electronic, 120V 50/60Hz ² 2E = Electronic, 277V 50/60Hz ²</p> <p>Q = Quartz re-strike system ³ X = Emergency circuit</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 flange (self flanged only) L1 = Clear lens</p> <p>HB26 = Bar hanger, 26" long, pair HB50 = Bar hanger, 50" long, pair RMB22 = Bar hanger for wooden joists, 22" long, pair TRM6* = Metal trim ring, specify finish TRR6 = Rimless trim ring FK* = Fuse kit, field installed, specify rating LSPOT = Selectively frosted glass lens (NSP distribution requires combination of SP and LSPOT) H347 = 347V stepdown transformer, 75VA H347200 = 347V stepdown transformer, 200VA</p>	

NOTES:

- 1 Not available with 150W.
- 2 Available with 150 watt only.
- 3 Not available with 20W.

PHOTOMETRICS

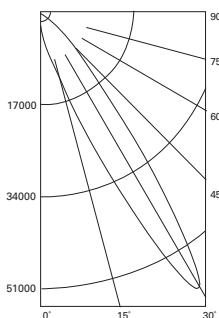


Lamp

**0° Aiming Angle
Horizontal Luminance**

**30° Aiming Angle
Horizontal Luminance**

**30° Aiming Angle
Vertical Luminance**



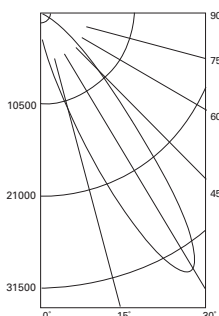
Narrow Spot
Test No. P12235, P12237
MA6SP150T6E-6471LI
T6 G12
30° Beam
Lumens=15000

Efficiency=55.4%

D	FC	Dia
15	243	4.4
17.5	179	5.2
20	137	5.9
25	88	7.4
30	61	8.9

D	FC	L	W	CB
15	156	5.4	4.7	8.7
17.5	115	6.3	5.5	10.1
20	88	7.2	6.3	11.5
25	56	9.1	7.8	14.4
30	39	10.9	9.4	17.3

D	FC	L	W	CB
5	308	4.6	2.6	8.7
6	214	5.6	3.1	10.4
8	120	7.4	4.1	13.9
10	77	9.3	5.2	17.3
12	53	11.2	6.2	20.8



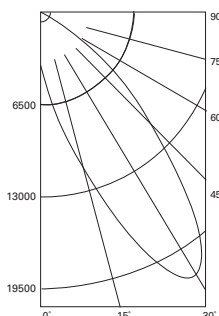
Spot
Test No. P12236, P12238
MA6SP150T6E-6471LI
T6 G12
30° Beam
Lumens=15000

Efficiency=58.1%

D	FC	Dia
15	149.0	6.3
17.5	110.0	7.3
20	84.0	8.3
25	54.0	10.4
30	37.0	12.5

D	FC	L	W	CB
15	102	7.2	7.0	8.7
17.5	75	8.4	8.1	10.1
20	58	9.6	9.3	11.5
25	37	12.0	11.6	14.4
30	26	14.4	14.0	17.3

D	FC	L	W	CB
5	216	5.7	3.5	8.7
6	150	6.8	4.3	10.4
8	84	9.1	5.7	13.9
10	54	11.3	7.1	17.3
12	34	13.6	8.5	20.8



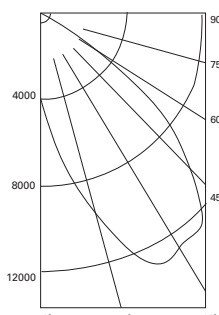
Narrow Flood
Test No. P12241, P12242
MA6NFL150T6E-6471LI
T6 G12
30° Beam
Lumens=15000

Efficiency=62.4%

D	FC	Dia
13	135	7.1
15	101	8.2
17.5	74	9.6
20	57	11.0
25	36	13.7

D	FC	L	W	CB
13	88	8.6	8.0	7.5
15	66	9.9	9.2	8.7
17.5	48	11.6	10.7	10.1
20	37	13.2	12.2	11.5
25	24	16.5	15.33	14.5

D	FC	L	W	CB
5	162	6.3	4.4	8.7
6	113	7.5	5.2	10.4
8	63	10.0	7.0	13.9
10	41	12.5	8.7	17.3
12	28	15.0	10.5	20.8



Flood
Test No. P12234, P12244
MA6FL150T6E-6471LI
T6 G12
30° Beam
Lumens=15000

Efficiency=62.7%

D	FC	Dia
13	91	9.5
15	68	11.0
17.5	50	12.8
20	38	14.7
25	25	18.4

D	FC	L	W	CB
13	59	10.6	11.4	7.5
15	45	12.2	13.3	8.7
17.5	33	14.3	15.4	10.1
20	25	16.3	17.6	11.5
25	16	20.4	22.0	14.5

D	FC	L	W	CB
5	142	5.1	5.4	8.7
6	98	6.1	6.4	10.4
8	55	8.1	8.6	13.9
10	35	10.1	10.7	17.3
12	25	12.0	12.9	20.8