

DESCRIPTION

Recessed 6 inch aperture directional/slope for T4 G6.5 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 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 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 GU6.5 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 120/227V 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

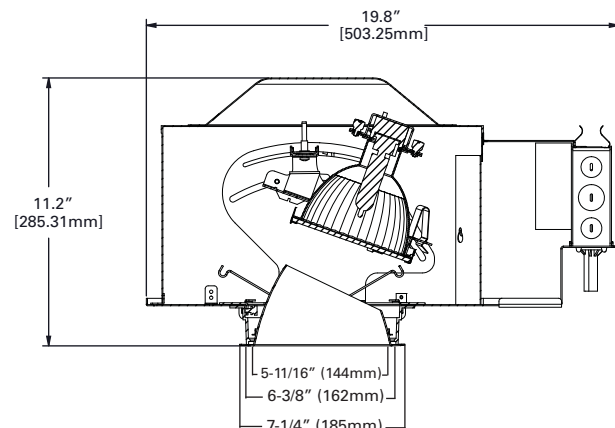
Thermally protected and cULus listed for damp locations. Wet location listed when used with L1 lens trim option. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part18 non consumer limits.



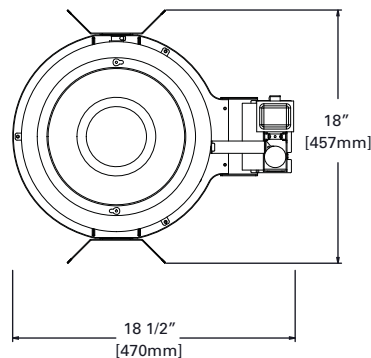
MA620T4G65
MA639T6G65
6470/6471

Ceramic Metal Halide
T4 GU6.5

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	

ORDERING INFORMATION

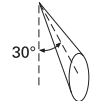
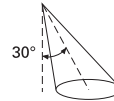
SAMPLE NUMBER: MA6FLW39T4G65EQ = 6" lens directional with Flood distribution and UNV 120/277V electronic ballast for a 39W T4 GU6.5 CMH lamp with quartz re-strike (Order Housing and Trim Separately)

Housing	Distribution	Lamp Type / Wattage	Ballast	Options	Trims	Finish	Option	Accessories
<p>MA6=6" CMH directional/slope</p> <p>MA6CP=6" CMH directional/slope, CCEA listed for City of Chicago plenum requirements</p>	<p>SP = Spot</p> <p>NFL = Narrow Flood</p> <p>FL = Flood</p>	<p>20T4G65=20W T4 GU6.5 CMH lamp</p> <p>39T4G65=39W T4 GU6.5 CMH lamp</p>	<p>E=120/277V 50/60 Hz Electronic</p>	<p>Q=Quartz Re-strike System ¹</p> <p>X=Emergency Circuit Lamp</p>	<p>6470 = 6" angle cut reflector, white polymer trim ring</p> <p>6471 = 6" angle cut reflector, self flanged</p>	<p>Alzak® Finishes</p> <p>LI=Specular Clear, Low Iridescent</p> <p>H=Semi Specular Clear</p> <p>WMH=Warm Haze</p> <p>G=Gold</p> <p>WH=Wheat</p> <p>GP=Graphite</p> <p>GPH= Graphite Haze</p> <p>K=Cognac</p> <p>KH=Cognac Haze</p> <p>BB=Black Baffle</p> <p>W=White Baffle</p>	<p>WF = White Painted Flanged (Self- flanged only)</p> <p>L1 = Clear glass lens</p>	<p>HB26=Bar Hangers, 26" Long, Pair</p> <p>HB50=Bar Hangers, 50" Long, Pair</p> <p>RMB-22=Bar Hangar for wooden joists, 22" Long, Pair</p> <p>TRM 4*= Metal Trim Ring, Specify Finish</p> <p>TRR4=Rimless Trim Ring</p> <p>FK*=Fuse kit field installed, specify rating</p> <p>LSPOT = Selectively frosted glass lens (NSP distribution requires combination of SP and LSPOT)</p> <p>H347=347V stepdown transformer, 75VA</p>

Notes:

¹ Not available with 20W.

PHOTOMETRICS

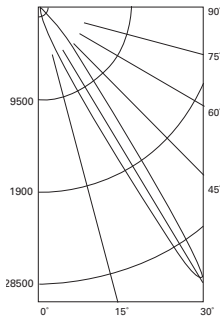


Lamp

**0° Aiming Angle
Horizontal Luminance**

**30° Aiming Angle
Horizontal Luminance**

**30° Aiming Angle
Vertical Luminance**



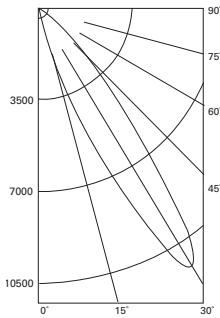
Narrow Spot
Test No. P12208, P12210
MA6SP39T6E-6471LI
T6 G12
30° Beam
Lumens=3500

Efficiency=57.6%

D	FC	Dia
13	176	2.2
15	132	2.6
17.5	97	3.0
20	74	3.4
25	48	4.3

D	FC	L	W	CB
13	116	2.8	2.2	7.5
15	87	3.2	2.6	8.7
17.5	64	3.8	3.0	10.1
20	49	4.3	3.4	11.5
25	31	5.4	4.3	14.4

D	FC	L	W	CB
5	167	2.8	1.5	8.7
6	116	3.4	1.8	10.4
8	65	4.5	2.4	13.9
10	42	5.6	3.0	17.3
12	29	6.8	3.5	20.8



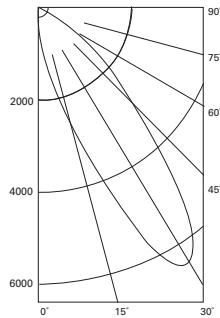
Spot
Test No. P12209, P12211
MA6SP39T6E-6471LI
T6 G12
30° Beam
Lumens=3500

Efficiency=61.04%

D	FC	Dia
13	65	4.5
15	49	5.2
17.5	36	6.1
20	27	6.9
25	18	8.7

D	FC	L	W	CB
13	42	5.4	4.8	7.5
15	32	6.3	5.6	8.7
17.5	23	7.3	6.5	10.1
20	18	8.3	7.4	11.5
25	11	10.4	9.3	14.5

D	FC	L	W	CB
5	69	4.8	3.0	8.7
6	48	5.7	3.5	10.4
8	27	7.6	4.7	13.9
10	17	9.5	5.9	17.3
12	12	11.4	7.1	20.8



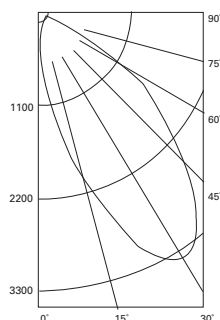
Narrow Flood
Test No. P12213, P12212
MA6NFL39T6E-6471LI
T6 G12
30° Beam
Lumens=3500

Efficiency=65.5%

D	FC	Dia
8	106	3.8
9	84	4.2
10	68	4.7
13	40	6.1
15	30	7.0

D	FC	L	W	CB
8	73	4.4	3.9	4.6
9	57	5.0	4.4	5.2
10	47	5.6	4.8	5.8
13	28	7.2	6.3	7.5
15	21	8.3	7.3	8.7

D	FC	L	W	CB
2	290	2.6	1.5	3.5
3	129	3.9	2.3	5.2
4	73	5.3	3.1	6.9
5	46	6.6	3.8	8.7
6	32	7.9	4.6	10.4



Flood
Test No. P12214, P12215
MA6FL39T6E-6471LI
T6 G12
30° Beam
Lumens=3500

Efficiency=64.6%

D	FC	Dia
8	61	5.7
9	48	6.4
10	39	7.1
13	23	9.3
15	17	10.7

D	FC	L	W	CB
8	41	5.9	6.2	4.6
9	32	6.6	6.9	5.2
10	26	7.7	7.7	5.8
13	16	10.0	10.0	7.5
15	12	11.5	11.5	8.7

D	FC	L	W	CB
2	220	2.3	2.1	3.5
3	102	3.4	3.2	5.2
4	57	4.6	4.3	6.9
5	37	5.7	5.4	8.7
6	25	6.9	6.4	10.4