

DESCRIPTION

Recessed directional luminaire with 1-3/4 inch square pinhole aperture utilizing MR16 GX10 ceramic metal halide lamp. Modular platform can be reconfigured from below the ceiling to accept a broad range of lamp modules and optical elements. Platform is suitable for shallow plenum commercial construction. Insulation must be kept 3" from top and sides of housing. Platform + module + element combination supports various lamp beam spreads for desired optical distribution with excellent light control and low aperture brightness.

SPECIFICATION FEATURES

Frame

Galvanized steel plaster frame with integral bar hanger receivers. Set-screws provide positive horizontal locking.

Collar

Matte black steel collar adjusts vertically for 1/2" - 1" thick ceilings and can be rotated +/- 7.5° thru the aperture. Integral gun sights facilitate the use of guide strings or laser lines. Shipped with a paint overspray protector installed in the collar.

Lamp Module

Installed or removed thru the aperture at 0°, 90°, 180° and 270° positions. Hot aiming rotates 365°, tilts 45° and locks in position using #2 Philips screwdriver. Translating center beam optics aligns axis of lamp with aperture as lamp translates from nadir to 45°.

Housing

Steel housing painted matte black for a visually dark interior. Removable hinged top allows for top access. All fasteners are captive.

Gaskets

Closed cell gaskets achieve restrictive airflow requirements without additional caulking.

Bar Hangers

Captive preinstalled bar hangers adjusts from 8-1/2" to 24" wide; pass thru feature allows shortening without removal. Captive nail penetrates standard and engineered lumber. Mounting flange levels platform with ceiling. Integral clip attaches directly to t-bar.

Butterfly Bracket

Provides 3" of vertical adjustment and accept 1/2" EMT, C channel or bar hangers.

Pinhole

Die cast aluminum flange with black occulus providing glare control. Occulus can be removed to facilitate painting or to create a larger (2-1/4") square aperture. Mouse trap type springs pull frame tight to ceiling. Light trap eliminates spill light at edge of flange.

May also be installed flush to ceiling using optional plastering lathing ring. Provided with both straight and angle cut parabolic shielding cones, shipped with angle cut version installed.

Junction Box

(7) 1/2" trade size pry outs, (3) integral clamps for non-metallic cable. Rated for (8) #12 thru branch circuits. Wago® type push wire connectors for field connections.

Thermal Protector

Self-resetting thermal protector protects against improper lamping and direct contact with insulation.

Ballast

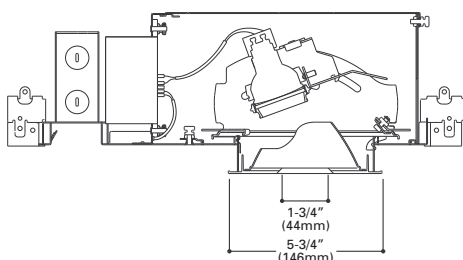
Universal input electronic ballast provides full light output and rated lamp life. Provides noise free operation and starting. Offers excellent line voltage regulation resulting in increased color stability and flicker free operation.

Lamp Capsule

Pulse rated ceramic GX10 lampholder connects to ballast with electrical quick connects. Accepts 1 lens, filter or optional lamp snoot.

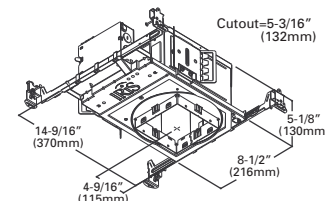
Code Compliance

Thermally protected, cULus listed for damp locations and ASTM-E283 AIRTITE(tm).



P406TAT MA4CMH20MRE E4PIN 20W MR16 Ceramic Metal Halide

1-3/4 Inch Square Directional



ENERGY DATA		Min. Starting Temp -30°C
Sound Rating Class A	EMI/RFI Emissions FCC 18C	
Input Frequency 50/60 Hz	Power Factor > 0.99	
Input Voltage 108V - 305V	THD < 10%	
20W	Input Power	24W
	Input Current	120V 0.20A
		277V 0.09A

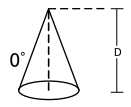
ORDERING INFORMATION: Complete unit consists of platform, lamp module and optical element.

Platform	Lamp Module	Ballast Option	Optical Element	Finish	Flange	Accessories
	MA4CMH					
P406TAT = 4" Square Aperture Non-IC Housing P406TCP = 4" Square Aperture Non-IC Chicago Plenum Housing	MA4CMH = Ceramic Metal Halide, MR16 Adjustable Lamp Module	20MRE = 20W CMH MR16 120 - 277V UNV	E4PIN = 1-3/4" Square Aperture Pinhole With Occulus [Blank] = Black Occulus		[Blank] = Self Flanged, Matte White Flange RL = Rimless, Matte White Flange	PLR4x4 = Plaster Lathing Ring (For Use With E4PINRL Only) RLA4x4 = Rimless Adapter (For Use With E4PINRL Only) LSA16 = Matte black lamp snoot accessory L Series - Filter Media For MR16 lamps (See Accessories specification sheet)

Trim: **E4PIN**
Lamp: **20W 12° CMH MR16**

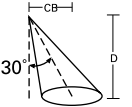


0° Horizontal Plane



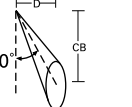
D	FC	Beam Diameter
8'	116	2.1'
9'	92	2.4'
10'	74	2.6'
13'	44	3.4'
16'	29	4.2'

30° Horizontal Plane



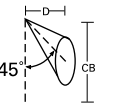
D	FC	L	W	CB
8'	77	2.2'	2.1'	4.6
9'	61	2.4'	2.4'	5.2
10'	49	2.7'	2.6'	5.8
13'	29	3.5'	3.4'	7.5
16'	19	4.3'	4.2'	9.2

30° Vertical Plane



D	FC	L	W	CB
2'	269	1.5'	0.8'	3.5
3'	120	2.3'	1.3'	5.2
4'	67	3.1'	1.7'	6.9
5'	43	3.8'	2.1'	8.7
6'	30	4.6'	2.5'	10.4

45° Vertical Plane

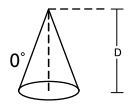


D	FC	L	W	CB
2'	600	0.8'	0.6'	2
3'	267	1.2'	1.0'	3
4'	150	1.6'	1.3'	4
5'	96	2.0'	1.6'	5
6'	67	2.4'	1.9'	6

Trim: **E4PIN**
Lamp: **20W 25° CMH MR16**

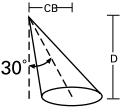


0° Horizontal Plane



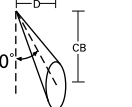
D	FC	Beam Diameter
8'	43	3.1'
9'	34	3.5'
10'	27	3.9'
13'	16	5.0'
15'	12	5.8'

30° Horizontal Plane



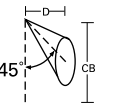
D	FC	L	W	CB
8'	28	3.4'	3.3'	4.6
9'	22	4.4'	3.7'	5.2
10'	18	3.9'	4.1'	5.8
13'	10	4.3'	5.3'	7.5
15'	8	5.6'	6.1'	8.7

30° Vertical Plane



D	FC	L	W	CB
2'	114	1.8'	1.3'	3.5
3'	51	2.8'	1.9'	5.2
4'	28	3.7'	2.5'	6.9
5'	18	4.6'	3.1'	8.7
6'	13	5.5'	3.8'	10.4

45° Vertical Plane



D	FC	L	W	CB
2'	232	1.1'	1.0'	2
3'	103	1.7'	1.4'	3
4'	58	2.2'	1.9'	4
5'	37	2.8'	2.4'	5
6'	26	3.3'	2.9'	6