

DESCRIPTION

Recessed lens directional luminaire with 2-1/4 inch square aperture utilizing a low voltage MR16 tungsten-halogen 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 direct contact with insulation and 2x8 residential construction. Platform + module + element combination supports various lamp beam spreads for desired optical distribution with excellent light control and low aperture brightness.

Catalog #		Type
Project		
Comments		Date
Prepared By		

SPECIFICATION FEATURES

Frame

Galvanized steel plaster frame with integral bar hanger receivers. Setscrews provide positive horizontal locking.

Collar

Matte black steel collar adjusts vertically for 1/2" - 1" thick ceilings and can be rotated +/- 75° 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 or from the top 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

Double wall aluminum 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.

Pinhole

Diecast aluminum flange with square pinhole aperture and integral glass lens. Lens can be removed to facilitate painting to match ceiling finish. Mousetrap type springs pull flange tight to ceiling. Light trap eliminates spill light at edge of flange. May also be installed flush to ceiling using optional plaster lathing ring. Provided with both straight and angle cut parabolic shielding cone, shipped with angle cut version installed.

Junction Box

(7) 1/2" trade size pry outs, (3) integral clamps for non-metallic cable. Rated for (4) #12 thru branch circuits. Wago® type push wire connectors for field connections.

Thermal Protector

Self-resetting thermal protector protects against improper lamping.

Transformer

Integral dual output toroidal magnetic transformer, 120V 50/60Hz input, 12V nominal 75VA maximum output. Separate output for circuits controlled by dimmers, compensates for losses in dimmers, improves color temperature and lumen output.

Lamp Capsule

Ceramic GX5.3 lamp holder mounts to an aluminum heat sink to dissipate heat. Connects to the transformer with electrical quick connects. Accepts 2 lenses, filters or optional lamp snoot.

Code Compliance

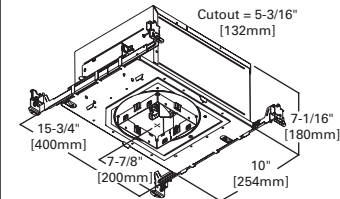
Thermally protected, IP labeled, cULus listed for wet locations and ASTM-E283 AIRTITE™. Suitable for direct contact with insulation.



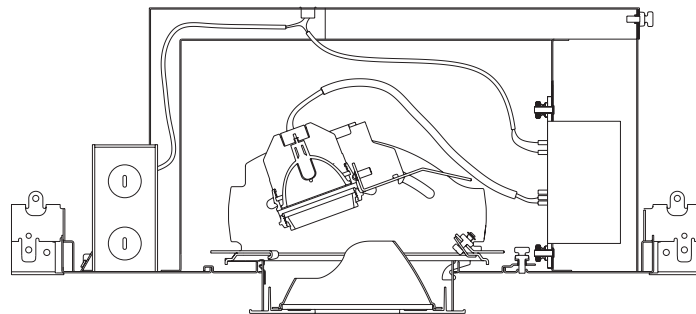
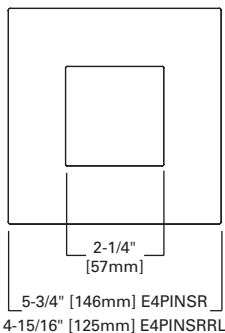
**P408ICAT
MA4MR
E4PINSR**

**50W MR16
Tungsten-Halogen**

2-1/4 Inch Square Lens Directional



ENERGY DATA		
Lamp Wattage (Nominal)	Input Power (Watts)	Input Current (Amps)
20	21	0.17
35	37	.031
37	39	0.32
42	44	0.37
50	53	0.44



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

Example: P408ICAT + MA4MR + E4PINSR

Platform	Lamp Module	Optical Element	Flange	Accessories
P408ICAT	MA4MR			
P408ICAT = 4" Square Aperture IC Housing	MA4MR = MR16 Directional Lamp Module, 120V Input	E4PINSR = 2-1/4" Square Aperture Pinhole, Lens	[Blank] = Self Flanged, Matte White Flange RL = Rimless Matte White Flange	LSA16 = Matte black lamp snoot accessory L Series - Filter Media For MR16 lamps (See Accessories specification sheet) RA4X4 = Rimless adapter for 4" optical elements PLR4X4 = Plaster Lathing Ring (RL Version only) RLA4X4 = Rimless Adapter (RL Version only)

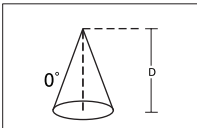
PHOTOMETRICS

P408ICAT MA4MR E4PINSR

Trim: **E4PINSR**
Lamp: **42MR16VNSP9**

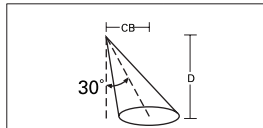


0° Horizontal Aiming



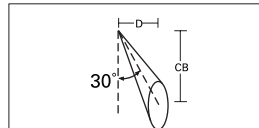
D	FC	Beam Diameter
8'	119	1.1'
9'	94	1.2'
10'	76	1.3'
13'	45	1.7'
15'	34	2.0'

30° Horizontal Footcandles



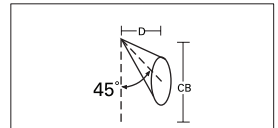
D	FC	L	W	CB
8'	77	1.7'	1.1'	4.6
9'	61	1.9'	1.3'	5.2
10'	49	2.1'	1.4'	5.8
13'	29	2.7'	1.9'	7.5
15'	22	3.1'	2.1'	8.7

30° Vertical Footcandles



D	FC	L	W	CB
2'	263	1.1'	0.6'	3.5
3'	117	1.6'	0.8'	5.2
4'	66	2.2'	1.1'	6.9
5'	42	2.7'	1.4'	8.7
6'	29	3.2'	1.7'	10.4

45° Vertical Footcandles

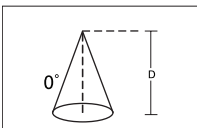


D	FC	L	W	CB
2'	670	0.4'	0.5'	2
3'	298	0.5'	0.8'	3
4'	167	0.7'	1.1'	4
5'	107	0.9'	1.4'	5
6'	74	1.1'	1.6'	6

Trim: **E4PINSR**
Lamp: **50W MR16 IR SP10**

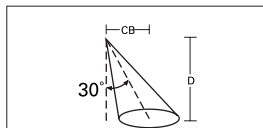


0° Horizontal Aiming



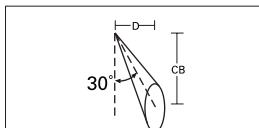
D	FC	Beam Diameter
8'	163	1.3'
9'	129	1.5'
10'	104	1.6'
13'	62	2.1'
15'	46	2.4'

30° Horizontal Footcandles



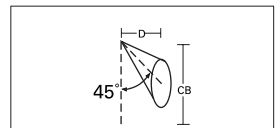
D	FC	L	W	CB
8'	94	1.9'	1.7'	4.6
9'	74	2.1'	1.9'	5.2
10'	60	2.4'	2.1'	5.8
13'	36	3.1'	2.8'	7.5
15'	27	3.5'	3.2'	8.7

30° Vertical Footcandles



D	FC	L	W	CB
2'	311	1.2'	0.7'	3.5
3'	138	1.8'	1.1'	5.2
4'	78	2.5'	1.5'	6.9
5'	50	3.1'	1.8'	8.7
6'	35	3.7'	2.2'	10.4

45° Vertical Footcandles

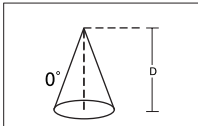


D	FC	L	W	CB
2'	763	0.6'	0.6'	2
3'	339	0.9'	0.8'	3
4'	191	1.3'	1.1'	4
5'	122	1.6'	1.4'	5
6'	85	1.9'	1.7'	6

Trim: **E4PINSR**
 Lamp: **37W MR16 10°**

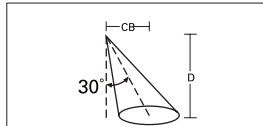


0° Horizontal Plane



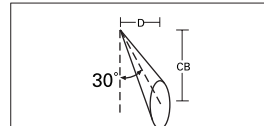
D	FC	Beam Diameter
10'	86	2.0'
13'	51	2.6'
15'	38	3.0'
17.5'	28	3.4'
20'	21	3.9'

30° Horizontal Plane



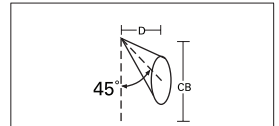
D	FC	L	W	CB
10'	55	2.3'	1.8'	5.8
13'	35	2.9'	2.3'	7.2
15'	24	3.5'	2.7'	8.7
16'	21	3.8'	2.9'	9.2
20'	14	4.7'	3.6'	11.5

30° Vertical Plane



D	FC	L	W	CB
2'	724	0.6'	0.5'	3.5
3'	322	1.0'	0.8'	5.2
4'	181	1.3'	1.0'	6.9
5'	116	1.6'	1.3'	8.7
6'	80	1.9'	1.5'	10.4

45° Vertical Plane



D	FC	L	W	CB
2'	724	0.6'	0.5'	2
3'	322	1.0'	0.8'	3
4'	181	1.3'	1.0'	4
5'	116	1.6'	1.3'	5
6'	80	1.9'	1.5'	6