

**DESCRIPTION**

Recessed lens directional luminaire with 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.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

**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 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 nadar thru 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.

**Optical Element**

Mousetrap type springs pull flange tight to ceiling. Light trap eliminates spill light at edge of flange and reflector. Available in self-flanged or metal trim ring versions.

**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.

**Lower Reflector**

Aluminum angle cut parabolic shielding prismatic with clear lens is available in a wide range of semi specular Alzak(tm) finishes. Corrugated Baffle: An optional embossed pattern that extends through the flange adding a subtle design element and reduces aperture brightness.

**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 or filters.

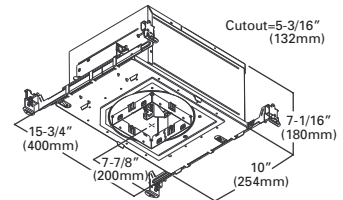
**Code Compliance**

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

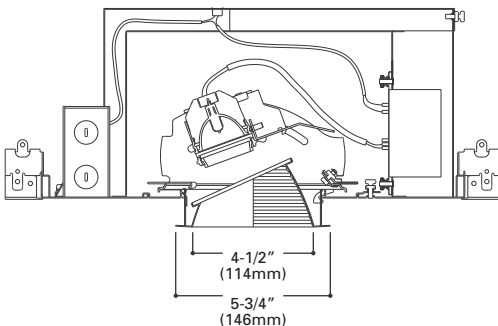


**P408ICAT  
MA4MR  
E4AASR  
E4AASRCB  
50W MR16  
Tungsten-Halogen**

**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.

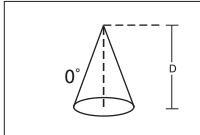
Platform	Lamp Module	Optical Element	Finish	Flange	Accessories
<b>P408ICAT</b>	<b>MA4MR</b>				
P408ICAT = 4" Square Aperture IC Housing	MA4MR = MR16 Directional Lamp Module, 120V Input	E4AASR = 4" Square Aperture Angle Cut Lower Shielding Prismatic, Lens E4AASRCB = 4" Square Aperture Corrugated Angle Cut Lower Shielding Prismatic, Lens	Alzak® Finishes H = Clear Haze WMH = Warm Haze WHH = Wheat Haze KH = Cognac Haze GPH = Graphite Haze CTH = Cobalt Haze CCH = Chocolate Haze BH = Black Haze Painted Finishes MW = Matte White MB = Matte Black	[Blank] = Metal Trim Ring, Matte White SF = Self Flanged SFWF = Self Flanged, Matte White Flange (SFWF not available with corrugated baffle)	EDC4x41 = Extended depth collar for 1" - 1-1/2" thick ceilings EDC4x42 = Extended depth collar for 1-1/2 - 2" thick ceilings L4X4LNR = Skytek linear spread lens L4x4SF = Solite soft focus lens L4x4SPD = Crystal #73 prismatic spread lens MTR4MW = Metal trim ring, matte white MTR4MB = Metal trim ring, matte black MTR4SN = Metal trim ring, satin nickel MTR4AC = Metal trim ring, antique copper MTR4TBZ = Metal trim ring, tuscan bronze L Series - Filter Media For MR16 lamps (See Accessories specification sheet)

PHOTOMETRICS

Trim: **E4AASRH**  
Lamp: **42MR16VNSP9**

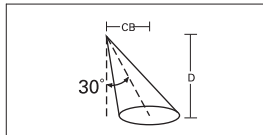


0° Horizontal Aiming



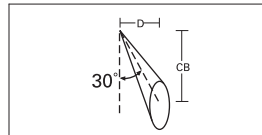
D	FC	Beam Dia
8'0"	113	1.1
9'0"	89	1.2
10'0"	72	1.3
13'0"	43	1.8
15'0"	32	2.0

30° Horizontal Footcandles



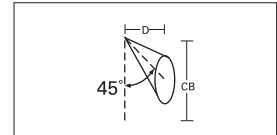
D	FC	L	W	CB
8'0"	77	1.7	1.2	4.6
9'0"	61	1.9	1.3	5.2
10'0"	49	2.1	1.5	5.8
13'0"	29	2.7	1.9	7.5
15'0"	22	3.1	2.2	8.7

30° Vertical Footcandles



D	FC	L	W	CB
2'0"	262	1.1	0.6	3.5
3'0"	116	1.6	0.8	5.2
4'0"	66	2.1	1.1	6.9
5'0"	42	2.7	1.4	8.7
6'0"	29	3.2	1.7	10.4

45° Vertical Footcandles

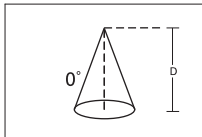


D	FC	L	W	CB
2'0"	704	0.6	0.4	2
3'0"	313	0.9	0.6	3
4'0"	176	1.2	0.8	4
5'0"	113	1.5	0.9	5
6'0"	78	1.8	1.1	6

Trim: **E4AASRH**  
Lamp: **50WMR16 IR SP10**

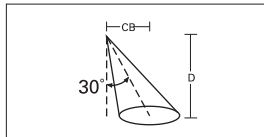


0° Horizontal Aiming



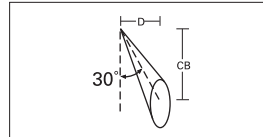
D	FC	Beam Dia
8'0"	163	1.3
9'0"	129	1.5
10'0"	105	1.6
13'0"	62	2.1
15'0"	46	2.5

30° Horizontal Footcandles



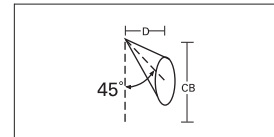
D	FC	L	W	CB
8'0"	98	2.0	1.7	4.6
9'0"	77	2.2	1.9	5.2
10'0"	62	2.5	2.1	5.8
13'0"	37	3.2	2.7	7.5
15'0"	28	3.7	3.1	8.7

30° Vertical Footcandles



D	FC	L	W	CB
2'0"	348	1.3	0.7	3.5
3'0"	155	1.9	1.0	5.2
4'0"	87	2.5	1.4	6.9
5'0"	56	3.2	1.7	8.7
6'0"	39	3.8	2.0	10.4

45° Vertical Footcandles



D	FC	L	W	CB
2'0"	861	0.7	0.5	2
3'0"	383	1.1	0.8	3
4'0"	215	1.4	1.1	4
5'0"	138	1.8	1.3	5
6'0"	96	2.1	1.6	6