

## DESCRIPTION

Specification grade 50 watt MR16 Pinhole fixture rated for direct contact with insulation. Adjustment mechanism features hot aiming capability, aiming marks and tool-less locking. Pinhole minimizes aperture appearance and optics provide glare free 50° cutoff to lamp and lamp image. For use with all halogen MR16 lamp varieties. **Lamp module and optical element can be changed after installation to provide a variety of lamp sources and distributions. e.g. into an A19 Wall Wash**

## SPECIFICATION FEATURES

**A...Reflector**

.040 thick aluminum spun parabolic interior reflector in Black Alzak® finish. Die-cast 1.82" occlusus with knife edge produces dark aperture. Occulus with either flat black or white finish.

**B...Flange**

Die-cast flange with matte white finish. Elements are keyed for proper insertion.

**C...Adjustability**

Lamp locks in 361° rotation, 45° tilt. Unit is relamped without unlocking adjustments. Translating centerbeam optics maximize light output.

**D...Lens**

Soft focus lens standard for smooth beam patterns. Up to two filter media can be used which are retained during relamping.

**E...Attachment**

Positive torsion springs pull flange tight to ceiling. Mechanical light trap eliminates spill light at edge of flange or reflector.

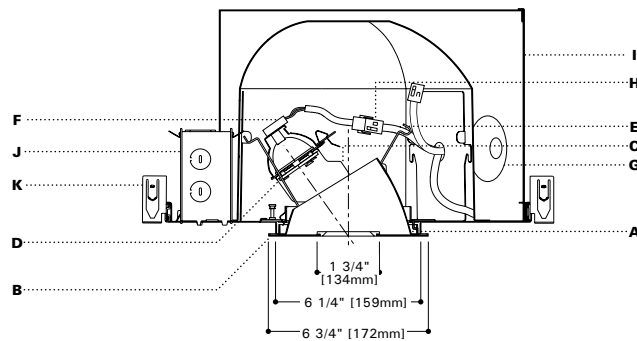
**F...Socket**

GX5.3 base for Bi-pin MR16 lamps. Back light shield keeps interior of fixture dark.

**G...Transformer**

Truvolt® toroidal transformer with dual-output taps for proper 120V operation and quiet operation when dimmed. Dimmer tap compensates for inherent voltage loss from dimmers, resulting in 30% more lumens than traditional laminated transformers. Toroidal design, with 90% or greater efficiency, features a rolled one-piece continuous core of M3 grade grain oriented silicon steel complete with an integral thermal to protect against overheating. For dimming, use dimmers rated for electromagnetic transformers. **Transformer is warranted for 5 years and is serviceable from below ceiling.**

Note: If a dimming system is operated for con-



struction lighting in its "shunt" mode, i.e. bypassing the dimmer modules, for an extended period of time, fixtures with the dual-tap toroidal transformer should be operated on the "Switched Fixture" output until the dimmers are in use. Operating fixtures on the "Dimmed Fixture" output with a full 120v input for an extended period will overdrive the lamp and cause shortened lamp life.

**H...Electrical**

Keyed quick connect for low voltage socket lead. Transformer is serviceable from below ceiling.

**I...Frame/Housing**

Hot dipped galvanized 20 gauge steel frame with built in 1/2 inch plaster lip. Aluminum .032 thick housing allows for heat dissipation and reduces weight. Matte black housing interior.

**J...Junction Box**

18 cubic inches, listed for 4#12 AWG or 6#14 AWG 90° C additional feed through conductors, has six 1/2 inch pryouts.

**K...Bar Hangers**

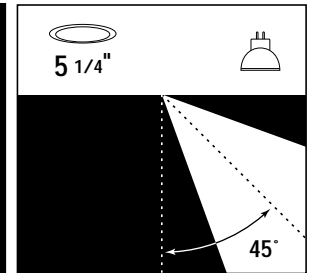
No Flex® bar hangers with positive locking, for use with wood, engineered wood and steel frame joists spaced up to 24" O.C. ship with platform. For use in T-bar ceilings order accessory MBCLP clips. Nailless barb and locator lip provide consistent installation height.

**L...Codes**

Thermally protected, IP labeled, for use in direct contact with insulation. Meets Washington State Air tight requirements, 1995 CABO Model Energy Code.

**M...Labels**

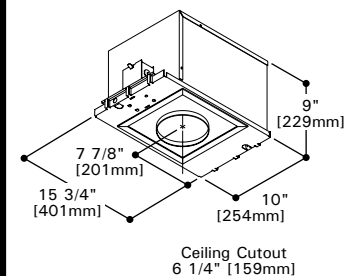
UL AND cUL listed, standard damp label, IBEW union made.



**P5  
M5MR  
E5PIN**

**50 W MR 16**

**5" ADJUSTABLE  
PINHOLE**

**Energy Data**

120V Input

Lamp Watts	Input Watts	Operating Current
20	23	.19
35	41	.34
37	42	.35
42	47	.39
50	57	.48

## ORDERING INFORMATION

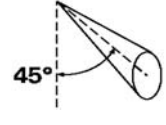
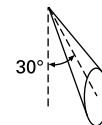
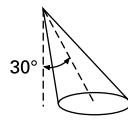
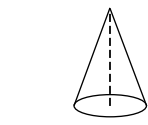
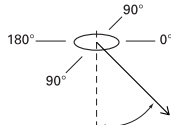
Complete unit consists of a platform, module and element

Platform	Lamp Module	Optical Element	Flange	Accessories
<b>P5</b>				
P5 = 5" Airtight IC Rated Housing	M5MR = 5" MR16 Low Voltage Transformer	E5PIN = MR16 45° Adjustable Pinhole	Blank = White die-cast with black occlusus W = White with white occlusus RAW = Natural die-cast	MBCLP = 40 Push On T Bar Clips (for 10 Units) PLE5 = Plaster Lip Extension for Max 2" Thick Ceiling FMC5 = Flush Mount Collar LSPD = Spread Lens LLNR = Linear Spread Lens LUV = UV Reduction Lens LLPINK = Light Pink LLSTRAW = Light Straw L27K = 2700K dichroic filter LDAY = Daylight LSPINK = Surprise Pink LPLAV = Pale Lavender LHEX = Hex Cell Louver LSNOOT = SNOOT
For additional options please consult factory.				

**COOPER LIGHTING SOLUTIONS**

ADI030724

## PHOTOMETRICS



Lamp	Luminance cd/m <sup>2</sup> @ Maximum Tilt			0° Aiming Angle Horizontal Footcandles				30° Aiming Angle Horizontal Footcandles					30° Aiming Angle Vertical Footcandles					45° Aiming Angle Vertical Footcandles				
	Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
GE Q50 MR16/C/FL/25																						
Beam Spread: 25°	85°	0	0	6'	77	2	2	6'	48	2.6	2.7	3.5	2'	106	2.1	1.4	3.5	2'	203	1.2	1.2	2
CBCP: 3,000	75°	0	0	8'	43	2.7	2.7	8'	27	3.5	3.6	4.6	3'	47	3.1	2.1	5.2	3'	90	1.8	1.7	3
	65°	0	0	10'	28	3.4	3.4	10'	17	4.4	4.5	5.8	4'	27	4.1	2.7	6.9	4'	51	2.4	2.3	4
	55°	0	0	12' 6"	18	4.3	4.3	12' 6"	11	5.5	5.6	7.2	5'	17	5.2	3.4	8.7	5'	33	3	2.9	5
	45°	0	0																			
	Test # H22410			Test # H22406				Test # H22409					Test # H22409					Test # H22410				
GE Q50 MR16/C/FL/40																						
Beam Spread: 40°	85°	0	0	6'	39	3	3	6'	25	3.9	3.5	3.5	2'	80	1.8	1.4	3.5	2'	142	1.2	1.2	2
CBCP: 1,700	75°	0	0	8'	22	4	4	8'	14	5.2	4.6	4.6	3'	36	2.7	2.1	5.2	3'	63	1.8	1.8	3
	65°	0	0	10'	14	5	5	10'	9	6.6	5.8	5.8	4'	20	3.6	2.8	6.9	4'	36	2.4	2.5	4
	55°	0	0	12' 6"	9	6.2	6.2	12' 6"	6	8.2	7.2	7.2	5'	13	4.5	3.5	8.7	5'	23	3	3.1	5
	45°	0	0																			
	Test # H22403			Test # H22400				Test # H22404					Test # H22404					Test # H22403				
GE Q50 MR16/C/NSP15																						
Beam Spread: 15°	85°	0	0	6'	208	1.5	1.5	6'	208	1.5	1.5	3.5	2'	1	0	2.1	3.5	2'	473	0.8	0.7	2
CBCP: 9,500	75°	0	0	8'	117	1.9	1.9	8'	117	1.9	1.9	4.6	3'	1	0	3.2	5.2	3'	210	1.2	1.1	3
	65°	0	0	10'	75	2.4	2.4	10'	75	2.4	2.4	5.8	4'	0	0	4.2	6.9	4'	118	1.6	1.4	4
	55°	0	0	12' 6"	48	3	3	12' 6"	48	3	3	7.2	5'	0	0	5.3	8.7	5'	76	1.9	1.8	5
	45°	0	0																			
	Test # H22398			Test # H22396				Test # H22397					Test # H22397					Test # H22398				

## Notes and Definitions:

**Luminance:** To convert cd/m<sup>2</sup> to footlamberts, multiply by 0.2919

- Beam spread is to 50% center beam candlepower (CBCP.)

D = Distance to floor or wall.

FC = Footcandles on floor or wall at center beam aiming location.

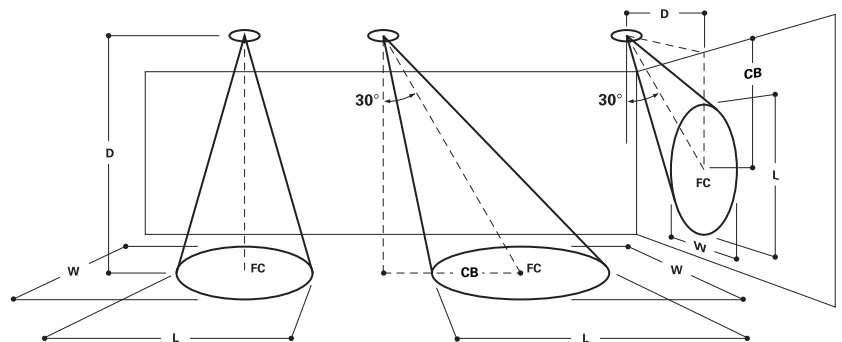
L = Effective Visual Beam length in feet (50% of maximum footcandle level.)

W = Effective Visual Beam width in feet (50% of maximum footcandle level.)

CB = Distance across or down to center beam location.

IRIS believes that bare lamp data photometrics vastly overstate the performance of low voltage adjustable accent fixtures.

The "real world photometrics" shown here are from off the shelf lamps in fixtures using a clear lens and operated at 12.0 volts. Please see page 64 & 65 of the IRIS catalog for a further discussion and appropriate correction multipliers.



Note: Specifications and Dimensions subject to change without notice.

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