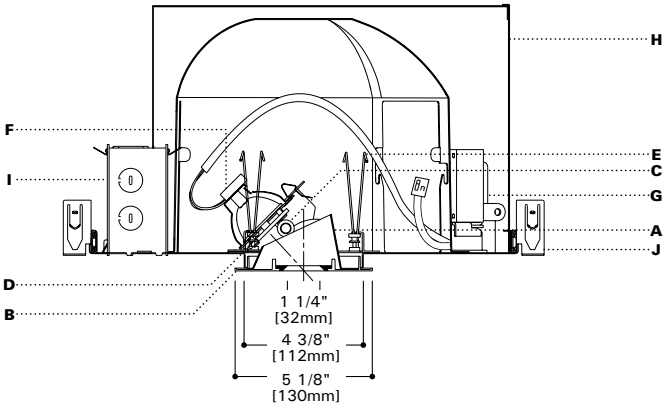
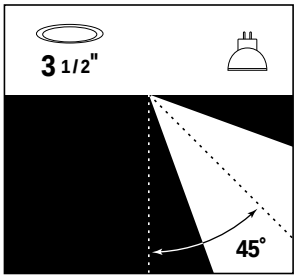
IRiS

CATALOG#: TYPE:

DESCRIPTION

Specification grade 50 watt MR16 adjustable pinhole fixture rated for direct contact with insulation. Adjustment mechanism features hot aiming capability, aiming marks and tooless locking. Pinhole minimizes aperture appearance, and reflector provides 50° cutoff to lamp and lamp image. For use with all halogen MR16 lamp varieties. **Optical element can be changed after installation to provide a variety of distributions e.g. into a downlight.**

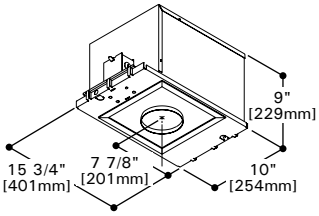




P3MR E3PIN

50W MR16

3" ADJUSTABLE PINHOLE



SPECIFICATION FEATURES

A···Reflector
.040 thick aluminum spun parabolic interior reflector in Black Alzak® finish. Die-cast 1.25" occulus with knife edge produces dark aperture. Occulus with either flat black or white finish.

B···Flange
Self flange reflector or die-cast flange with either matte white or clear coat finish. Die-cast flanges are easily removed for field painting. Elements are keyed for proper insertion.

C···Adjustability
Removable lamp adjustment mechanism provides up to 45° tilt and 361° rotation and locks into any aiming position. Unit is relamped without unlocking adjustments. Translating centerbeam optics maximize light output.

D···Lens
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 12.0V operation. 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 and ensure quiet operation. 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 construction 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···Frame/Housing
Hot dipped galvanized 20 gauge steel frame with built in 1/2 inch plaster lip. Gunsights allow for consistent alignment. Aluminum .032 thick housing allows for heat dissipation and reduces weight. Matte black housing interior.

I···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.

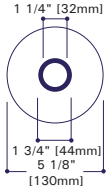
J···Bar Hangers
No Flex® bar hangers with positive locking, for use with wood, engineered wood and steel frame joists spaced up to 24" O.C. ship with platform. For use in T-bar ceilings order accessory MBCLP. Nailess barb and locator lip provide consistent installation height.

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

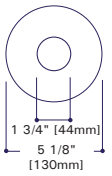
L···Labels
UL and cUL listed, standard damp label, IBEW union made.

PINHOLE ELEMENT VARIETIES (PLAN VIEW)

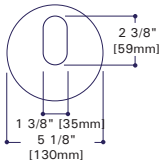
E3PIN
E3PINW
E3PINPOL
E3PINSAL
E3PINRAW



E3PINLARGE
E3PINLARGE RAW
E3PINRD



E30VAL



ORDERING INFORMATION

Complete unit consists of a platform and element

Platform	Optical Element	Flange	Accessories
P3MR = 3.5" Airtight IC Rated Low Voltage Housing P3MR REMOTE = 3.5" Airtight IC Rated Housing for Remote Transformer	E3PIN = MR16 1-1/4" 45° Adjustable Pinhole E3PINLARGE = MR16 2" 45° Adjustable Pinhole E3OVAL = Oval Pinhole E3PINRD = Radius Edges	Blank = White die-cast with Black Occulus[1] W = White with white occulus[1] POL = Polished Aluminum with Black Occulus[1] SAL = Satin Aluminum with Black Occulus[1] RAW[2] = Raw Die-cast with black Occulus[1]	MBCLP = 40 Push On T Bar Clips (for 10 Units) PLE3 = Plaster Lip Extension for Max 2" Thick Ceiling FMC3 = Flush Mount Collar LSPD = Spread Lens LLNR = Linear Spread Lens LUV = UV Reduction Lens LSNOOT = SNOOT LLPINK = Light Pink Lens LLSTRAW = Light Straw Lens L27K = 2700K dichroic filter LDAY = Daylight Lens LSPINK = Surprise Pink Lens LPLAV = Pale Lavender Lens LHEX = Hex Cell Louver

1 Occulus on E3PIN only
2 E3PIN and E3PIN large

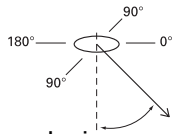
For additional options please consult factory.

Energy Data

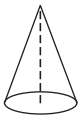
120V Input

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

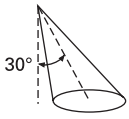
PHOTOMETRICS



Luminance cd/m² @ Maximum Tilt

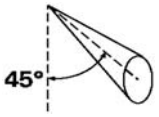


0° Aiming Angle Horizontal Footcandles



30° Aiming Angle Horizontal Footcandles

30° Aiming Angle Vertical Footcandles



45° Aiming Angle Vertical Footcandles

Lamp	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/NSP15	85°	0	0	6'	154	1.3	1.3	6'	82	1.7	1.7	3.5	2'	171	1.4	0.9	3.5	2'	345	0.8	0.7	2
Lumens: 750	75°	0	0	8'	87	1.8	1.8	8'	46	2.3	2.3	4.6	3'	76	2.1	1.4	5.2	3'	153	1.2	1	3
Beam Spread: 15°	65°	0	0	10'	56	2.2	2.2	10'	30	2.8	2.8	5.8	4'	43	2.8	1.8	6.9	4'	86	1.6	1.3	4
CBCP: 9,500	55°	0	0	12' 6"	36	2.8	2.8	12' 6"	19	3.5	3.5	7.2	5'	27	3.5	2.3	8.7	5'	55	2	1.7	5
	45°	0	0	Test # H21242				Test # H21247					Test # H21247					Test # H21248				
	Test # H21248																					
GE Q50 MR16/C/NFL25	85°	0	0	6'	73	1.8	2.4	6'	38	2.6	2.3	3.5	2'	78	2.1	1.3	3.5	2'	148	1.1	1	2
Lumens: 884	75°	0	0	8'	41	2.4	3.2	8'	22	3.4	3.1	4.6	3'	35	3.2	1.9	5.2	3'	66	1.7	1.5	3
Beam Spread: 25°	65°	0	0	10'	26	3	4	10'	14	4.3	6	5.8	4'	20	4.3	2.5	6.9	4'	37	2.3	1.9	4
CBCP: 3,000	55°	0	0	12' 6"	17	3.8	5	12' 6"	9	5.4	4.9	7.2	5'	13	5.3	3.2	8.7	5'	24	2.8	2.4	5
	45°	0	0	Test # H21188				Test # H21197					Test # H21197					Test # H21196				
	Test # H21196																					
GE Q50 MR16/C/FL40	85°	0	0	6'	38	3.2	2.5	6'	22	3.1	3	3.5	2'	75	2	1.4	3.5	2'	101	1.6	1.3	2
Lumens: 800	75°	0	0	8'	21	4.2	3.4	8'	13	4.1	4	4.6	3'	33	3	2.1	5.2	3'	45	2.4	1.9	3
Beam Spread: 40°	65°	0	0	10'	14	5.3	4.2	10'	8	5.2	5.1	5.8	4'	19	4.1	2.8	6.9	4'	25	3.2	2.6	4
CBCP: 1,700	55°	0	0	12'6"	9	6.6	5.3	12'6"	5	6.5	6.3	7.2	5'	12	5.1	3.5	8.7	5'	16	4	3.2	5
	45°	0	1997	Test # H21206				Test # H21205					Test # H21205					Test # H21204				
	Test # H21204																					
PH45 MR16/IRC/SP8	85°	0	15719	6'	171	1	1	6'	79	1.5	1.5	3.5	2'	159	1.3	0.8	3.5	2'	324	0.7	0.6	2
Lumens: 1030	75°	0	5293	8'	96	1.4	1.4	8'	45	2.1	2	4.6	3'	70	2	1.2	5.2	3'	144	1.1	1	3
Beam Spread: 8°	65°	0	3242	10'	62	1.7	1.7	10'	29	2.6	2.5	5.8	4'	40	2.6	1.6	6.9	4'	81	1.4	1.3	4
CBCP: 16,000	55°	0	2389	12'6"	39	2.3	2.3	12'6"	18	3.2	3.1	7.2	5'	25	3.3	2	8.7	5'	52	1.8	1.6	5
	45°	0	0	Test # H21224				Test # H21225					Test # H21225					Test # H21226				
	Test # H21226																					
GE Q42 MR16/C/VNSP9	85°	0	0	6'	123	0.8	1.2	6'	64	1.3	1.3	3.5	2'	121	1.1	0.8	3.5	2'	246	0.6	0.6	2
Lumens: 575	75°	0	0	8'	69	1	1.6	8'	36	1.7	1.7	4.6	3'	54	1.6	1.1	5.2	3'	109	0.9	0.9	3
Beam Spread: 9°	65°	0	0	10'	44	1.3	2	10'	23	2.1	2.1	5.8	4'	30	2.2	1.5	6.9	4'	61	1.2	1.2	4
CBCP: 12,500	55°	0	0	12'6"	28	1.6	2.5	12'6"	15	2.6	2.7	7.2	5'	19	2.7	1.9	8.7	5'	39	1.5	1.5	5
	45°	0	0	Test # H21207				Test # H21208					Test # H21208					Test # H21209				
	Test # H21209																					
OS Q37 MR16/IR/SP/10	85°	0	0	6'	151	1.3	1.8	6'	87	1.8	1.6	3.5	2'	147	1.6	0.9	3.5	2'	329	1	0.7	2
Lumens: 900	75°	0	0	8'	85	1.8	2.4	8'	49	2.4	2.2	4.6	3'	65	2.4	1.3	5.2	3'	146	1.4	1	3
Beam Spread: 10°	65°	0	0	10'	54	2.2	3	10'	31	3	2.7	5.8	4'	37	3.1	1.8	6.9	4'	82	1.9	1.3	4
CBCP: 13,100	55°	0	0	12'6"	35	2.8	3.8	12'6"	20	3.8	3.4	7.2	5'	24	3.9	2.2	8.7	5'	53	2.4	1.7	5
	45°	0	0	Test # H21258				Test # H21257					Test # H21257					Test # H21256				
	Test # H21256																					
GE Q20 MR16/VNSP7	85°	0	0	6'	87	0.7	0.6	6'	38	0.8	0.9	3.5	2'	79	0.7	0.6	3.5	2'	172	0.4	0.4	2
Lumens: 200	75°	0	0	8'	49	0.9	0.8	8'	22	1.1	1.2	4.6	3'	35	1.1	0.8	5.2	3'	76	0.6	0.6	3
Beam Spread: 7°	65°	0	0	10'	31	1.1	1	10'	14	1.4	1.5	5.8	4'	20	1.5	1.1	6.9	4'	43	0.8	0.7	4
CBCP: 7,400	55°	0	0	12'6"	20	1.4	1.3	12'6"	9	1.7	1.8	7.2	5'	13	1.8	1.4	8.7	5'	28	1	0.9	5
	45°	0	0	Test # H21233				Test # H21236					Test # H21236					Test # H21239				
	Test # H21239																					

Notes and Definitions:

Luminance: To convert cd/m² to footlamberts, multiply by 0.2919

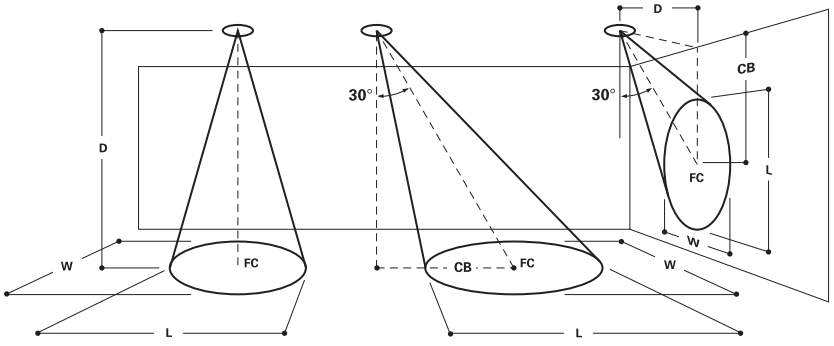
- Beam spread is to 50% center beam candlepower (CBCP.)

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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