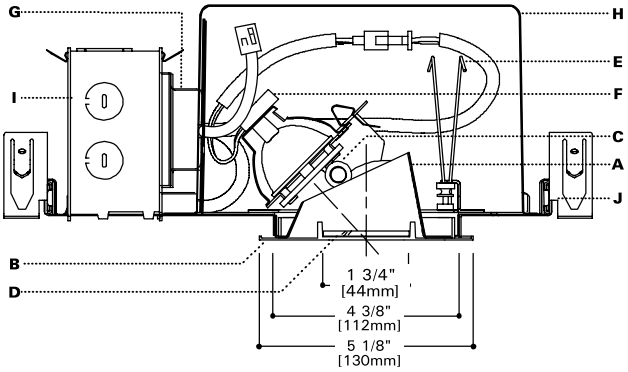
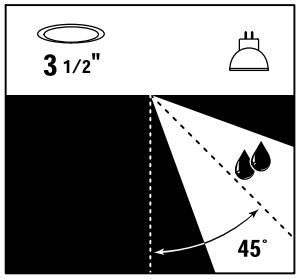
IRiS

CATALOG#: TYPE:

DESCRIPTION

Specification grade 71 watt MR16 adjustable wet location pinhole fixture. Adjustment mechanism features hot aiming capabilities, 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. Units small size is ideal for tight construction areas. Insulation must be kept 3" away from sides and top of fixture. **Optical element can be changed after installation to provide a variety of distributions. e.g. into a Downlight.**

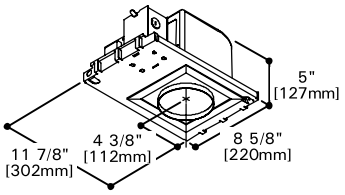




PN3MR
E3AASRPIN

71W MR16

3" ADJUSTABLE SHOWER PINHOLE



Ceiling Cutout
4 3/8" (112mm)

SPECIFICATION FEATURES

A···Reflector
.040 thick aluminum spun parabolic interior reflector in Black Alzak® finish.

B···Flange
Die-cast flange with matte white 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
Clear tempered glass lens seals for wet location. Soft focus lens standard in platform 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 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. 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 three 1/2" 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. Unit is airtight and exchanges less than 2.0 CFM with the plenum at a pressure of 75 pascals. Insulation must be kept three inches away from fixture sides and none on top as to entrap heat.

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

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
65	70	.58
71	77	.64
75	81	.68

ORDERING INFORMATION

Complete unit consists of a platform and element

Platform	Optical Element	Flange	Accessories
PN3MR	**E3AASRPIN**		

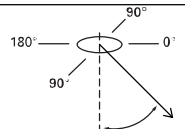
PN3MR = 3" Non-IC Low Voltage Housing
PN3MR REMOTE = 3" Non-IC Housing for Remote Transformer

E3AASRPIN = MR16 1-3/4" 0-45° Adjustable Shower Pinhole

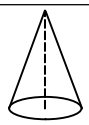
Blank = White Die Cast
POL = Polished Aluminum
SAL = Satin Aluminum

MBCLP = 40 Push On T Bar Clips (for 10 Units)
PLE3 = Plaster Lip Extension for Max 2" Thick Ceiling
LSPD = Spread Lens
LLNR = Linear Spread Lens
LUV = UV Reduction Lens
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
LSNOOT = SNOOT

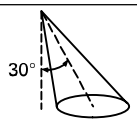
For additional options please consult factory.



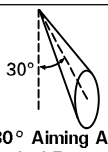
Luminance cd/m^2 @ Maximum Tilt



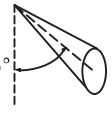
0° Aiming Angle Horizontal Footcandles



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 Q20 MR16/C/VNSP7	85°	0	0	6'	87	0.7	0.7	6'	38	0.8	0.8	2.3	2'	79	0.7	0.6	3.5	2'	172	0.4	0.4	2
	75°	0	0	8'	49	0.9	0.9	8'	22	1	1	4.0	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	1.1	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	1.4	12'6"	9	1.7	1.8	7.2	5'	13	1.8	1.4	8.7	5'	28	1	0.9	5
Test # H21237	45°	1152	1382	Test # H21233				Test # H21236					Test # H21236					Test # H21239				
OS Q37 MR16/IR/SP10	85°	0	0	6'	151	1.3	1.3	6'	87	1.8	1.6	3.5	2'	147	1.6	0.9	3.5	2'	329	1	0.7	2
	75°	0	0	8'	85	1.8	1.8	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	2.2	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°	284	284	12'6"	35	2.8	2.8	12'6"	20	3.8	3.4	7.2	5'	24	3.9	2.2	8.7	5'	53	2.4	1.7	5
Test # H21250	45°	3225	2304	Test # H21258				Test # H21257					Test # H21257					Test # H21256				
GE Q42 MR16/C/VNSP	85°	0	0	6'	123	0.8	1.8	6'	64	1.3	1.3	3.5	2'	121	1.1	0.8	3.5	2'	246	0.6	0.6	2
	75°	0	0	8'	69	1	2.4	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	3	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	3.8	12'6"	15	2.6	2.7	7.2	5'	19	2.7	1.9	8.7	5'	39	1.5	1.5	5
Test # H21209	45°	0	0	Test # H21207				Test # H21208					Test # H21208					Test # H21209				
PH Q45 MRC16/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
	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	2.2	2.2	12'6"	18	3.2	3.1	7.2	5'	25	3.3	2	8.7	5'	52	1.8	1.6	5
Test # H21226	45°	0	0	Test # H21224				Test # H21225					Test # H21225					Test # H21226				
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
	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
Test # H212398	45°	0	0	Test # H21242				Test # H21247					Test # H21247					Test # H21248				
GE Q50 MR16/CNFL25	85°	0	1847	6'	73	1.8	1.8	6'	38	2.6	2.3	3.5	2'	78	2.1	1.3	3.5	2'	148	1.1	1	2
	75°	622	622	8'	41	2.4	2.4	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°	381	381	10'	26	3	3	10'	14	4.3	3.9	5.8	4'	20	4.3	2.5	6.9	4'	37	2.3	1.9	4
CBCP: 3,000	55°	561	561	12'6"	17	3.8	3.8	12'6"	9	5.4	4.9	7.2	5'	13	5.3	3.2	8.7	5'	24	2.8	2.4	5
Test # H21185	45°	1366	1366	Test # H21188				Test # H21197					Test # H21197					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
	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
Test # H22402	45°	0	0	Test # H21206				Test # H21205					Test # H21205					Test # H21204				
OS Q65 MR16/Q/NSP/10				D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
				6'	89	1.4	1.4	6'	51	1.6	1.7	3.5	2'	99	1.3	0.8	3.5	2'	209	0.6	0.7	2
				8'	50	1.9	1.9	8'	28	2.1	2.3	4.6	3'	44	1.9	1.3	5.2	3'	93	1	1	3
Beam Spread: 10°				10'	32	2.4	2.4	10'	18	2.6	2.9	5.8	4'	25	2.5	1.7	6.9	4'	52	1.3	1.3	4
CBCP: 12,500				12'6"	20	3	3	12'6"	12	3.3	3.6	7.2	5'	16	3.2	2.1	8.7	5'	33	1.6	1.7	5
				Test # H21270				Test # H21275					Test # H21275					Test # H21276				
Q65 MR16/Q/FL40				D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
				6'	51	2.4	2.4	6'	31	3.1	3	3.5	2'	65	2.1	1.5	3.5	2'	128	1.3	1.2	2
				8'	29	3.2	3.2	8'	18	4.2	4	4.6	3'	29	3.1	2.3	5.2	3'	57	2	1.8	3
Beam Spread: 40°				10'	18	4	4	10'	11	5.2	5	5.8	4'	16	4.1	3.1	6.9	4'	32	2.7	2.4	4
CBCP: 2,100				12'6"	12	5	5	12'6"	7	6.5	6.2	7.2	5'	10	5.2	3.8	8.7	5'	21	3.3	3	5
				Test # H21262				Test # H21266					Test # H21266					Test # H21267				

Notes and Definitions:

Luminance: To convert cd/m^2 to footlamberts, multiply by 0.2919

- Data is based upon bare lamps photometrics. Photometrics shown were tested with the E3PIN.
- Beam spread is to 50% center beam candlepower (CBCP.)

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.

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.

Specifications and Dimensions subject to change without notice.