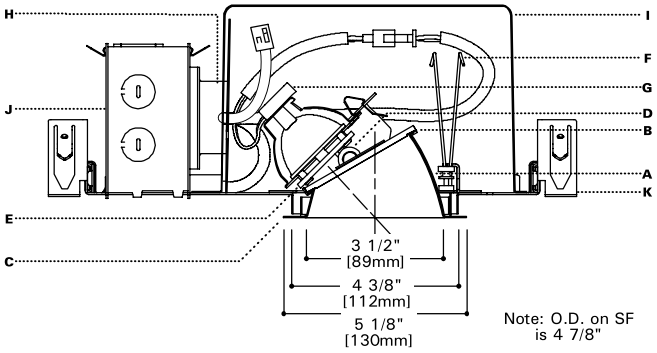
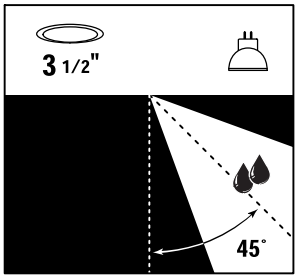
IRiS

CATALOG#: TYPE:

DESCRIPTION

Specification grade, wet listed 71 watt MR16 lamp adjustable fixture. Adjustment mechanism features hot aiming capability, aiming marks and tooless locking. Optics provide glare-free 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**

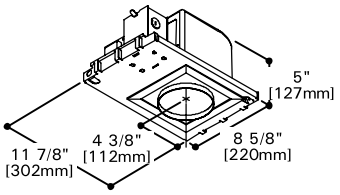




PN3MR
E3AASR

71W MR16

3" ADJUSTABLE SHOWER



Ceiling Cutout:
4 3/8" [112mm]

SPECIFICATION FEATURES

A···Reflector
.040 thick aluminum spun parabolic interior reflector in Clear, Gold, Haze, Warm Haze, Black Alzak® finish painted gloss white or matte white. Special cone colors listed below.

B···Glass
.125 thick tempered clear glass protects lamp from direct spray of water and is retained during relamping.

C···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.

D···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.

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

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

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

H···Transformer
Truvolt® toroidal transformer with dual-output taps for proper 12.0V 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 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.

I···Frame/Housing
Hot dipped galvanized 20 gauge steel frame with built in 1/2 inch plaster lip. Gunsights allow for consistent alignment.

J···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.

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 push on clips. Nailess barb and locator lip provide consistent installation height.

L···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.

M···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

SAMPLE NUMBER: PN3MR-E3AASRC
Complete unit consists of a platform and element

Platform	Optical Element	Finish	Flange	Accessories
PN3MR	**E3AASR**			

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

Optical Element
- E3AASR = 3" MR16 0 - 45° Adjustable Accent Lensed Reflector

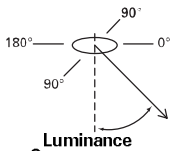
Finish
- Standard
- C = Clear
- H = Haze
- G = Gold
- WMH = Warm Haze
- W = Gloss White
- B = Black
- MW = Matte
- White
- Custom
- K = Cognac
- KH = Cognac Haze
- CC = Chocolate
- Custom
- CCH = Chocolate Haze
- BU = Blush
- Custom Cont.
- BUH = Blush Haze
- GP = Graphite
- GPH = Graphite Haze
- PN = Pine
- PNH = Pine Haze
- SK = Sky
- SKH = Sky Haze

Flange
- Blank = White die-cast
- SF = Self Flange
- SFWF = Self Flange Painted White
- RAW = Natural Die Cast

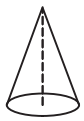
Accessories
- MBCLP = 40 Push On T Bar Clips (for 10 Units)
- PLE3 = Plaster Lip Extension for Max 2" Thick Ceiling
- L-SPD = Spread Lens
- L-LNR = Linear Spread Lens
- L-UV = UV Reduction Lens
- L-LPINK = Light Pink
- L-LSTRAW = Light Straw Lens
- L-27K = 2700K dichroic filter
- L-DAY = Daylight Lens
- L-SPINK = Surprise Pink Lens
- L-PLAV = Pale Lavender Lens
- L-HEX = Hex Cell Louver

For additional options please consult factory.
Matte white is recommended for self flanged reflectors

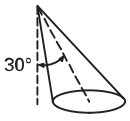
PHOTOMETRICS



Luminance cd/m^2 @ Maximum Tilt

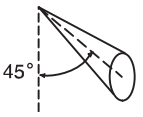


0° Aiming Angle Horizontal Footcandles



30° Aiming Angle Horizontal Footcandles

30° Aiming Angle Vertical Footcandles



45° Aiming Angle Vertical Footcandles

Lamp	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				
		D	FC	L	W	CB	D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
OS 65MR16Q/0/NSP/10		4'	618	0.7	0.7		4'	250	1	1	2.3		2'	220	1.2	0.8	3.5		2'	712	0.6	0.5	2.0
		7'	202	1.1	1.1		7'	82	1.7	1.8	4.0		3'	98	1.9	1.3	5.2		3'	316	0.9	0.7	3.0
Beam Spread: 10°		10'	99	1.6	1.6		10'	40	2.4	2.5	5.8		4'	55	2.5	1.7	6.9		4'	178	1.2	0.9	4.0
CBCP: 14,000		12' 6"	63	2	2		12' 6"	26	3	3.2	7.2		5'	35	3.1	2.1	8.7		5'	114	1.5	1.2	5.0
		Test # H1269					Test # H21273						Test # H21273						Test # H21274				
OS 65MR16Q/40/FL	Degree@ 180°@ 90°	D	FC	L	W		D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
	85° 0 1869	4'	130	2.3	2.3		4'	85	2.8	2.7	2.3		2'	104	2.1	1.9	3.5		2'	195	1.5	1.7	2.0
	75° 629 629	7'	42	4	4		7'	28	5	4.7	4.0		3'	46	3.2	2.9	5.2		3'	87	2.3	2.5	3.0
Beam Spread: 40°	65° 385 385	10'	21	5.8	5.8		10'	14	7.1	6.8	5.8		4'	26	4.3	3.9	6.9		4'	49	3.0	3.3	4.0
CBCP: 2,100	55° 852 568	12' 6"	13	7.2	7.2		12' 6"	9	8.9	8.4	7.2		5'	17	5.3	4.8	8.7		5'	31	3.8	4.2	5.0
Test # H21261	45° 10367 2765	Test # H21263					Test # H21264						Test # H21264						Test # H21265				
GE Q50MR16C/NSP15	Degree@ 180°@ 90°	D	FC	L	W		D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
	85° 0 1869	4'	445	1	1		4'	291	1.2	1.2	2.3		2'	252	1.5	1.0	3.5		2'	639	0.8	0.7	2.0
	75° 629 629	7'	145	1.8	1.8		7'	95	2.1	2.1	4.0		3'	112	2.2	1.5	5.2		3'	284	1.2	1.1	3.0
Beam Spread: 15°	65° 385 385	10'	71	2.5	2.5		10'	47	3	3	5.8		4'	63	2.9	1.9	6.9		4'	160	1.6	1.5	4.0
CBCP: 9,500	55° 568 284	12' 6"	46	3.1	3.1		12' 6"	30	3.7	3.7	7.2		5'	40	3.7	2.4	8.7		5'	102	2.1	1.8	5.0
Test # H21248	45° 3686 1382	Test # H21240					Test # H21243						Test # H21243						Test # H21244				
GE Q50MR16/C/NFL25	Degree@ 180°@ 90°	D	FC	L	W		D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
	85° 0 1847	4'	174	1.6	1.6		4'	108	2	2.2	0		4'	27	4.5	3.4	6.9		6'	28	3.9	3.8	6
	75° 622 622	7'	57	2.9	2.9		7'	35	3.5	3.8	0		6'	12	6.7	5.1	10.4		8'	16	5.2	5.1	8
Beam Spread: 25°	65° 381 381	10'	28	4.1	4.1		10'	17	5	5.4	0		10'	4	11.2	8.5	17.3		10'	10	6.5	6.4	10
CBCP: 3,000	55° 561 561	12' 6"	18	5.1	5.1		12' 6"	11	6.2	6.7	0		12'	3	13.4	10.2	20.8		12'	7	7.8	7.7	12
Test # H21185	45° 4099 1366	Test # H21187					Test # H1193						Test # H21193						Test # H21185				
GE Q50MR16/C/FL40	Degree@ 180°@ 90°	D	FC	L	W		D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
	85° 0 0	4'	129	2.0	2.0		4'	66	2.8	2.8	2.3		2'	100	1.8	1.7	3.5		2'	159	1.5	1.6	2
	75° 0 0	7'	42	3.4	3.4		7'	22	5.0	4.8	4.0		3'	45	2.7	2.5	5.2		3'	71	2.3	2.4	3
Beam Spread: 40°	65° 0 0	10'	21	4.9	4.9		10'	11	7.1	6.9	5.8		4'	25	3.6	3.3	6.9		4'	40	3	3.2	4
CBCP: 1,700	55° 0 0	12'6"	13	6.1	6.1		12'6"	7	8.9	8.6	7.2		5'	16	4.5	4.1	8.7		5'	25	3.8	4	5
Test # H21204	45° 0 1997	Test # H21249					Test # H21199						Test # H21202						Test # H21203				
PH Q45MR16C/IRC/SP8	Degree@ 180°@ 90°	D	FC	L	W		D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
	85° 0 821	4'	696	0.6	0.8		4'	342	1	0.9	2.3		2'	300	1.3	0.8	3.5		2'	722	0.7	0.7	2.0
	75° 0 277	7'	227	1.1	1.4		7'	112	1.8	1.7	4.0		3'	133	2.0	1.2	5.2		3'	321	1.0	1.0	3.0
Beam Spread: 8°	65° 0 169	10'	111	1.6	2		10'	55	2.5	2.4	5.8		4'	75	2.6	1.5	6.9		4'	181	1.3	1.3	4.0
CBCP: 16,000	55° 125 250	12'6"	71	2	2.5		13'	32	3.3	3.1	7.2		5'	48	3.3	1.9	8.7		5'	116	1.7	1.6	5.0
Test # H22402	45° 1316 2024	Test # H21223					Test # H21227						Test # H21227						Test # H21228				
GE Q42MR16C/VNSP	Degree@ 180°@ 90°	D	FC	L	W		D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
	85° 1849 1849	4'	498	0.5	0.8		4'	284	0.8	0.8	2.3		2'	261	1.0	0.7	3.5		2'	571	0.5	0.6	2.0
	75° 623 623	7'	163	0.9	1.4		7'	93	1.4	1.4	4.0		3'	116	1.5	1.0	5.2		3'	254	0.7	1.0	3.0
Beam Spread: 9°	65° 381 381	10'	80	1.2	2		10'	45	2.1	2	5.8		4'	65	2.0	1.4	6.9		4'	143	0.9	1.3	4.0
CBCP: 12,500	55° 281 0	12' 6"	51	1.6	2.5		12' 6"	29	2.6	2.5	7.2		5'	42	2.5	1.7	8.7		5'	91	1.2	1.6	5.0
Test # H21210	45° 3190 2279	Test # H21212					Test # H21211						Test # H21211						Test # H21210				
OS Q37MR16/IR/SP10	Degree@ 180°@ 90°	D	FC	L	W		D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
	85° 0 0	4'	681	0.6	0.8		4'	356	1	0.9	2.3		2'	303	1.3	0.7	3.5		2'	909	0.7	0.5	2.0
	75° 0 0	7'	222	1.1	1.4		7'	116	1.7	1.5	4.0		3'	135	2.0	1.1	5.2		3'	404	1.0	0.7	3.0
Beam Spread: 10°	65° 0 0	10'	109	1.6	2		10'	57	2.5	2.1	5.8		4'	76	2.6	1.4	6.9		4'	227	1.3	1.0	4.0
CBCP: 13,100	55° 284 284	12'6"	70	1.9	2.5		12'6"	36	3.1	2.7	7.2		5'	48	3.3	1.8	8.7		5'	145	1.6	1.2	5.0
Test # H21250	45° 3225 2304	Test # H21253					Test # H21254						Test # H21254						Test # H21255				
GE Q20MR16C/VNSP7	Degree@ 180°@ 90°	D	FC	L	W		D	FC	L	W	CB		D	FC	L	W	CB		D	FC	L	W	CB
	85° 0 0	4'	312	0.5	0.5		4'	153	0.8	0.5	2.3		2'	150	0.9	0.5	3.5		2'	482	0.4	0.3	2.0
	75° 0 0	7'	102	0.8	0.8		7'	50	1.4	0.9	4.0		3'	67	1.3	0.8	5.2		3'	214	0.6	0.5	3.0
Beam Spread: 7°	65° 0 0	10'	50	1.2	1.2		10'	24	2.1	1.3	5.8		4'	38	1.7	1.0	6.9		4'	120	0.8	0.6	4.0
CBCP: 7,400	55° 0 0	12' 6"	32	1.5	1.5		12' 6"	16	2.6	1.7	7.2		5'	24	2.1	1.3	8.7		5'	77	1.0	0.8	5.0
Test # H21237	45° 1152 1382	Test # H21232					Test # H21234						Test # H21234						Test # H21237				

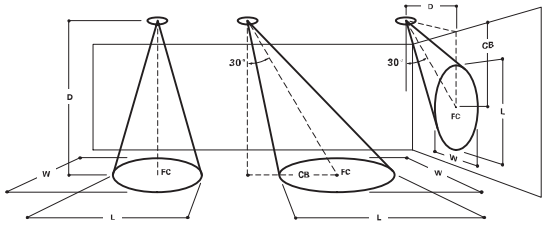
Notes and Definitions:

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

- Data is based upon bare lamps photometrics.
- 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..



Note: Specifications and Dimensions subject to change without notice. **Visit our web site at www.cooperlighting.com**