

DESCRIPTION

Specification grade 71 watt MR16 adjustable fixture. Adjustment mechanism features hot aiming capability, aiming marks and toolless 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

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Reflector

Slot cut cone minimizes view to interior. 0.040 thick aluminum spun parabolic interior reflector in Clear, Gold, Haze, Warm Haze, Black Alzak® finish, painted gloss white or matte white. Other options available upon request. E3AA20 recommended for ceilings over 7/8" thick.

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.

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.

Lens

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

Attachment

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

Socket

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

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.

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.

Junction Box

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

Bar Hangers

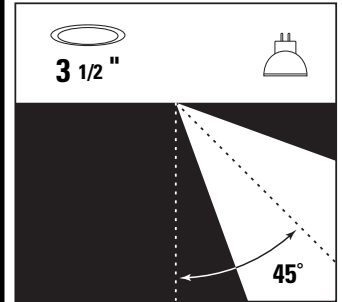
No Flex® bar hangers with positive locking, for use with wood, engineered wood and steel frame joists spaced up to 24" O.C. ship with platform. For use in T-bar ceilings order accessory MBCLP clips. Nailless barb and locator lip provide consistent installation height.

Codes

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.

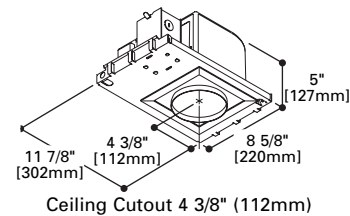
Labels

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

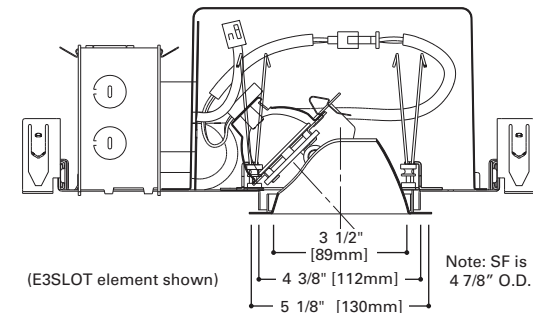


**PN3MR
E3AA
E3AA20
E3SLOT**

**71W MR16
3" ADJUSTABLE
ACCENT**



Ceiling Cutout 4 3/8" (112mm)

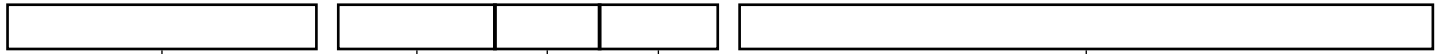


Energy Data

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



Platform
PN3MR=3" Non-IC Low Voltage Housing
PN3MRREMOTE=3" Non-IC Housing for Remote Transformer

Optical Element
E3AA=MR16 0 - 45 deg Adjustable Accent
E3AA20=MR16 0 - 20 deg Adjustable Accent
E3SLOT= MR16 0 - 45 deg Adjustable Accent Slot Cut Reflector

Finish
B=Black
C=Clear
CC=Chocolate
CCH=Chocolate Haze
G= Gold
GP= Graphite
GPH= Graphite Haze
H= Haze
K= Cognac
KH= Cognac Haze
MW= Matte White
W= Gloss White
WMH= Warm Haze

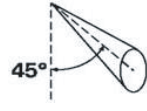
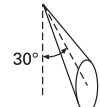
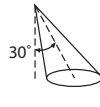
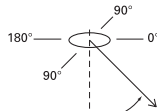
Flange
Blank=White Die-cast flange ring
SF=Self Flange
SFWF=Self Flanged, Painted White
RAW= Raw Die-cast

Accessories
MBCLP=40 Push On T Bar Clip (for 10 Units)
LSNOOT=Lamp Snoot for MR16 Lamp
Flush Mount
FMC3= 3" Flush Mount Collar
L Series Filter
LLNR: Linear Spread Lens
LUV: Ultraviolet Reduction Lens
Tinting Colors
L27K: 2700 Dichroic Filter
LLSTRAW: Light Straw Tint
LPLAV: Pale Lavender Tint
Plaster Lip
PLE3: Plaster Lip Extension for Max 2" Thick Ceiling

LHEX=Hex Cell Louver
LSPD: Spread Lens
LLPINK: Light Pink Tint
LDAY: Daylight Tint
LSPINK: Surprise Pink Tint

Notes: * Matte white is recommended for self flanged reflectors.

PHOTOMETRICS



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				
	Degree	@ 180° @ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
GE Q20 MR16C/VNSP/7 Lumens: 200 Beam Spread: 7° CBCP: 7,400	85°	0 0	6'	145	0.7	0.6	6'	81	1.1	0.8	3.5	2'	174	0.8	0.5	3.5	2'	521	0.4	0.3	2
	75°	0 0	8'	81	1	0.8	8'	46	1.5	1	4.6	3'	77	1.2	0.8	5.2	3'	231	0.6	0.5	3
	65°	0 0	10'	52	1.2	1	10'	29	1.9	1.3	5.8	4'	43	1.7	1	6.9	4'	130	0.8	0.7	4
	55°	0 0	12'6"	33	1.5	1.3	12'6"	19	2.3	1.6	7.2	5'	28	2.1	1.3	8.7	5'	83	0.9	0.8	5
	45°	922 922	Test # H21231				Test # H21235					Test # H21235					Test # H21238				
OS Q37 MR16/IR/SP10 Lumens: 900 Beam Spread: 10° CBCP: 13,100	85°	0 0	6'	321	0.9	1.2	6'	181	1.5	1.1	3.5	2'	355	1.3	0.7	3.5	2'	986	0.6	0.5	2
	75°	0 0	8'	180	1.3	1.6	8'	102	1.9	1.5	4.6	3'	158	1.9	1	5.2	3'	438	1	0.7	3
	65°	0 0	10'	115	1.6	2	10'	65	2.4	1.9	5.8	4'	89	2.5	1.3	6.9	4'	247	1.3	1	4
	55°	284 284	12'6"	74	2	2.5	12'6"	42	3	2.3	7.2	5'	57	3.1	1.7	8.7	5'	158	1.6	1.2	5
	45°	3225 2304	Test # H21252				Test # H21251					Test # H21251					Test # H21250				
GE Q42MR16C/VNSP/9 Lumens: 575 Beam Spread: 9° CBCP: 12,500	85°	0 0	6'	263	0.7	1.2	6'	144	1.1	1.2	0	2'	287	1	0.7	3.5	2'	806	0.5	0.5	2
	75°	0 0	8'	148	1	1.6	8'	81	1.5	1.6	0	3'	128	1.5	1	5.2	3'	358	0.8	0.8	3
	65°	0 0	10'	95	1.2	2	10'	52	1.9	2	0	4'	72	2	1.4	6.9	4'	201	1	1.1	4
	55°	0 284	12'6"	61	1.5	2.5	12'6"	33	2.4	2.5	0	5'	46	2.4	1.7	8.7	5'	129	1.3	1.3	5
	45°	922 1382	Test # H21215				Test # H21214					Test # H21214					Test # H21213				
PH Q45 MRC16/IRC/SP8 Lumens: 1030 Beam Spread: 8° CBCP: 16,000	85°	0 0	6'	343	1	1.2	6'	152	1.5	1.6	3.5	2'	299	1.3	0.9	3.5	2'	859	0.7	0.6	2
	75°	0 0	8'	193	1.3	1.6	8'	86	2	2.2	4.6	3'	133	2	1.3	5.2	3'	382	1	0.9	3
	65°	0 0	10'	124	1.6	2	10'	55	2.6	2.7	5.8	4'	75	2.6	1.8	6.9	4'	215	1.3	1.2	4
	55°	1136 284	12'6"	79	2	2.5	12'6"	35	3.2	3.4	7.2	5'	48	3.3	2.2	8.7	5'	137	1.7	1.5	5
	45°	3456 2304	Test # H21222				Test # H21219					Test # H21219					Test # H21230				
GE Q50 MR16C/VNSP15 Lumens: 750 Beam Spread: 15° CBCP: 12,500	85°	0 1869	6'	220	1.5	1.8	6'	143	1.7	1.7	3.5	2'	252	1.5	1	3.5	2'	690	0.8	0.7	2
	75°	629 629	8'	124	2	2.4	8'	80	2.2	2.3	4.6	3'	112	2.3	1.5	5.2	3'	306	1.2	1.1	3
	65°	385 385	10'	79	2.5	3	10'	51	2.8	2.9	5.8	4'	63	3	2	6.9	4'	172	1.6	1.5	4
	55°	568 284	12'6"	51	3.1	3.8	12'6"	33	3.5	3.6	7.2	5'	40	3.8	2.5	8.7	5'	110	2	1.8	5
	45°	3686 1382	Test # H21241				Test # H21245					Test # H21245					Test # H21246				
GE Q50 MR16C/VNFL25 Lumens: 884 Beam Spread: 25° CBCP: 9,500	85°	0 1847	6'	86	2.4	3	6'	50	3	3.2	3.5	2'	115	2.2	1.7	3.5	2'	269	1.3	1.3	2
	75°	0 622	8'	48	3.1	4	8'	28	4	4.3	4.6	3'	51	3.3	2.5	5.2	3'	119	1.9	1.9	3
	65°	0 381	10'	31	3.9	5	10'	18	5	5.4	5.8	4'	29	4.5	3.4	6.9	4'	67	2.6	2.5	4
	55°	281 281	12'6"	20	4.9	6.3	12'6"	12	6.2	6.7	7.2	5'	18	5.6	4.2	8.7	5'	43	3.2	3.2	5
	45°	7056 1366	Test # H21182				Test # H21194					Test # H21194					Test # H21195				
GE Q50 MR16C/FL40 Lumens: 800 Beam Spread: 40° CBCP: 1,700	85°	0 1847	6'	57	2.9	4.2	6'	29	4.3	4.1	3.5	2'	102	1.8	1.7	3.5	2'	169	1.5	1.6	2
	75°	622 622	8'	32	3.9	4.9	8'	16	5.7	5.5	4.6	3'	45	2.7	2.5	5.2	3'	75	2.3	2.4	3
	65°	381 381	10'	21	4.9	7	10'	11	7.1	6.9	5.8	4'	266	3.6	3.3	6.9	4'	42	3	3.2	4
	55°	842 281	12'6"	13	6.1	8.8	12'6"	7	8.9	8.6	7.2	5'	16	4.5	4.2	8.7	5'	27	3.8	3.9	5
	45°	14345 1822	Test # H21249				Test # H21199					Test # H21199					Test # H21198				
OS Q65 MR16Q/10/VNSP/B Lumens: 1100 Beam Spread: 10° CBCP: 14,000	85°	0 0	6'	320	1	1.2	6'	122	1.4	1.6	3.5	2'	236	1.2	0.9	3.5	2'	770	0.6	0.5	2
	75°	0 0	8'	180	1.3	1.6	8'	68	1.9	2.2	4.6	3'	105	1.9	1.3	5.2	3'	342	0.9	0.7	3
	65°	0 385	10'	115	1.6	2	10'	44	2.4	2.7	5.8	4'	59	2.5	1.8	6.9	4'	193	1.2	0.9	4
	55°	568 568	12'6"	74	2	2.5	12'6"	28	2.9	3.4	7.2	5'	38	3.1	2.2	8.7	5'	123	1.5	1.2	5
	45°	8524 3686	Test # H21268				Test # H21271					Test # H21271					Test # H21272				
OS Q65 MR16Q/40/FL Lumens: 1100 Beam Spread: 40° CBCP: 2,100	85°	0 1869	6'	66	3.3	4.8	6'	40	4.2	3.9	3.5	2'	110	2.1	1.9	3.5	2'	207	1.5	1.7	2
	75°	629 629	8'	37	4.4	6.4	8'	23	5.7	5.3	4.6	3'	49	3.2	2.9	5.2	3'	92	2.3	2.5	3
	65°	385 385	10'	24	5.4	8	10'	15	7.1	6.6	5.8	4'	27	4.3	3.8	6.9	4'	52	3.1	3.3	4
	55°	852 568	12'6"	15	6.8	10	12'6"	9	8.8	8.2	7.2	5'	18	5.3	4.8	8.7	5'	33	3.8	4.1	5
	45°	10376 2765	Test # H21259				Test # H21260					Test # H21260					Test # H21261				

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.

