

**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. 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

<b>Catalog #</b>		<b>Type</b>	
<b>Project</b>		<b>Date</b>	
<b>Comments</b>			
<b>Prepared by</b>			

**SPECIFICATION FEATURES**

**Baffle**

0.040 thick aluminum spun sawtooth baffle in matte black or white powdercoat finish.

**Flange**

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(TM) 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.

**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**

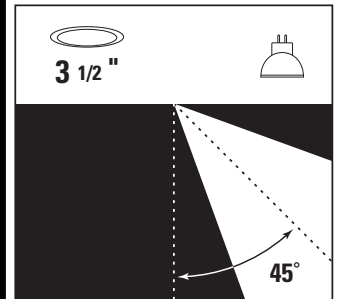
No Flex® bar hangers with positive locking, for use with wood, engineered wood and steel frame joists spaced up to 24" O.C. ship with platform. For use in T-bar ceilings order accessory MBCLP clips. Nailless barb and locator lip provide consistent installation height.

**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.

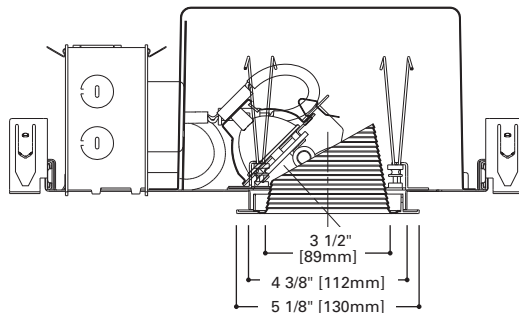
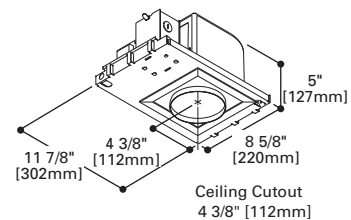
**Labels**

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



**PN3MR  
E3AABB**

**71W MR16  
3" ADJUSTABLE  
BAFFLE**



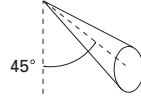
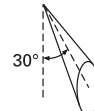
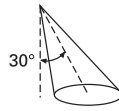
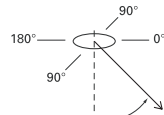
**Energy Data**

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

Sample Number: Complete unit consists of a platform and element

<p><b>Platform</b>  <b>PN3MR</b> = 3" Airtight Non-IC Low Voltage Housing  <b>PN3MRREMOTE</b> = 3" Airtight Non-IC Housing for Remote Transformer</p>	<p><b>Optical Element</b>  <b>E3AA</b> = MR16 Adjustable Accent 0 - 45 deg Baffle</p>	<p><b>Finish</b>  <b>BB</b>=Black Baffle  <b>WB</b>=White Baffle</p>	<p><b>Flange</b>  <b>Blank</b> =White Die-cast  <b>RAW</b> =Natural Die-cast</p>	<p><b>Accessories</b>  <b>MBCLP</b> =40 Push On T Bar Clip (for 10 Units)  <b>L Series Filter</b>  <b>LLNR</b> = Linear Spread Lens  <b>L27K</b> = 2700 Dichroic Filter  <b>LDAY</b> = Daylight Lens  <b>Plaster Lip</b>  <b>PLE3</b> = Plaster Lip Extension for Max 2" Thick Ceiling</p>
				<p><b>LHEX</b>=Hex Cell Louver  <b>LSPD</b> = Spread Lens  <b>LLPINK</b> = Light Pink Lens  <b>LPLAV</b> = Pale Lavender Lens</p>
				<p><b>LSNOOT</b>= SNOOT  <b>LUV</b>=Ultraviolet Reduction Lens  <b>LLSTRAW</b> =Light Straw Lens  <b>LSPINK</b> = Surprise Pink Lens</p>

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 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'	130	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 # H21129					Test # H21129					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°	7059 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°	10367 2765	Test # H21259				Test # H21160					Test # H21160					Test # H21161				

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 with a clear reflector and operated at 12.0 volts. Please see page 64 & 65 of the IRIS catalog for a further discussion and appropriate correction multipliers.

