

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

Catalog #	Type
Project	
Comments	Date
Prepared by	

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

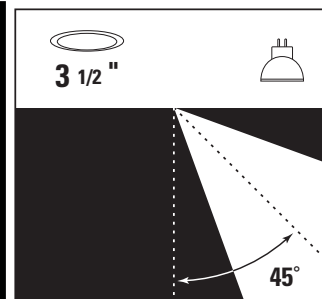
No Flex® bar hangers with positive locking, for use with wood, engineered wood and steel frame joists spaced up to 24" O.C. ship with platform. For use in T-bar ceilings order accessory MBCLP clips. Nailless barb and locator lip provide consistent installation height.

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.

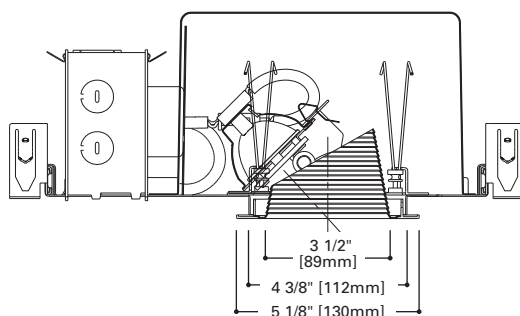
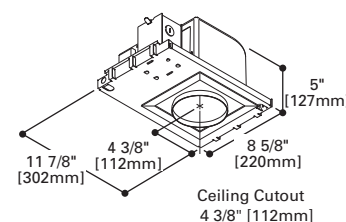
Labels

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



**PN3MR
E3AABB**

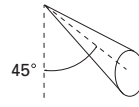
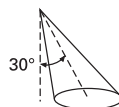
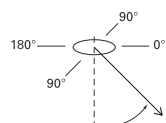
**71W MR16
3" ADJUSTABLE
BAFFLE**



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

COOPER Lighting
www.cooperlighting.com



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								
GE Q20 MR16C/VNSP/7	Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB		
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								
Test # H21238			Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
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								
Test # H21250			Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
GE Q42MR16C/VNSP/9	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								
Test # H21213			Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
PH Q45 MRC16/IRC/SP8	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								
Test # H21230			Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
GE Q50 MR16C/VNSP15	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								
Test # H21246			Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
GE Q50 MR16C/VNFI25	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								
Test # H21195			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/FL40	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								
Test # H21198			Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
OS Q65 MR16Q/10/VNSP/B	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								
Test # H21272			Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
OS Q65 MR16Q/40/FL	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								
Test # H21261			Degree	@ 180°	@ 90°	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB

Notes and Definitions:

Luminance: To convert cd/m² to footlamberts, multiply by 0.2919 • Beam spread is to 50% center beam candlepower (CBP.)

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.