

DESCRIPTION

Recessed 3.5" aperture directional luminaire with lens angle cut shielding reflector utilizing a low voltage MR16 tungsten-halogen lamp. Suitable for 2x10 residential or commercial constructions, airtight and can be used in direct contact with insulation. Housing platform + optical element support various lamp beams providing desired optical distribution with excellent light control and low aperture brightness. Interchangeable optical elements provide design flexibility; luminaire can be changed from downlight, to accent to wall wash.

Catalog #		Type
Project		
Comments		Date
Prepared By		

SPECIFICATION FEATURES

Frame

Galvanized steel plaster frame with integral bar hanger receivers. Setscrews provide positive horizontal locking. Integral gun sights facilitate the use of guide strings or laser lines for accurate positioning. Shipped with an overspray protector installed.

Housing

Double wall housing provides for effective thermal management. Internal housing is painted matte black for a visually dark interior.

Bar Hangers

Bar hangers adjust from 8-1/2" to 24" wide; pass thru feature allows shortening without removal. Captive nail penetrates standard and engineered lumber. Mounting flange levels platform with ceiling. Integral clip attached directly to tee-bar.

Gaskets

Closed cell gaskets achieve restrictive airflow requirements without additional caulking.

Adjustment Mechanism

Hot aiming rotates 365°, tilts 45° and locks in position. Angle markings assist in repeatable settings. Translating center beam optics aligns axis of primary reflector with aperture from nadir to 45°. Shipped set at nadir. Removable thru aperture for service.

Lamp Capsule

Retained in the adjustment mechanism with spring loaded ball catches, aim and focus is not disturbed during lamp replacement. Ceramic GX5.3 lamp holder mounts a die cast aluminum heat sink to dissipate heat and provide maximum lamp life. Connects to the transformer with electrical quick connect. Accepts 2 lenses, filters, or an optional lamp snoot.

Lower Reflector

Spun 0.04" thick aluminum angle cut parabolic contour with integral clear glass lens provides 50° room side cutoff and is available in a wide range of specular and semi-specular Alzak® finishes. Available with self-flange or metal trim ring. Light trap eliminates spill light at edge of trim ring and reflector. Metal trim ring can be removed for painting and can be installed flush mount with optional flush mount collar accessory. Keyed to adjustment mechanism preventing directional trims being installed incorrectly.

Trim Retention

Retained with two torsion springs holding the flange tightly to the finished ceiling surface and accommodates ceiling thickness from 1/2" - 1" thick. Optional PLE3 plaster lip extender accommodates up to 2" thick ceilings.

Junction Box

(6) 1/2" trade size pry outs positioned to allow straight conduit runs. 18 in3 internal volume supports up to (10) #12 or (14) #14 AWG 90° C conductors for pass thru or switch legs.

Transformer

Integral magnetic step down transformer, 120V 50/60Hz input, 12V, 50VA nominal output is greater than 90% efficient. Toroidal wound core is epoxy encapsulated providing extremely low noise and reliable operation.

Compliance

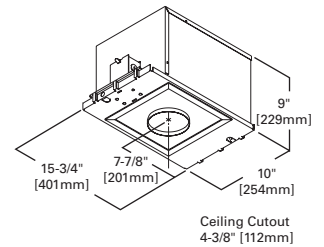
Type IC thermally protected, suitable for direct contact with insulation and cULus listed for wet locations. Restrictive airflow per ASTM-E283. Contains no mercury or lead and RoHS compliant.



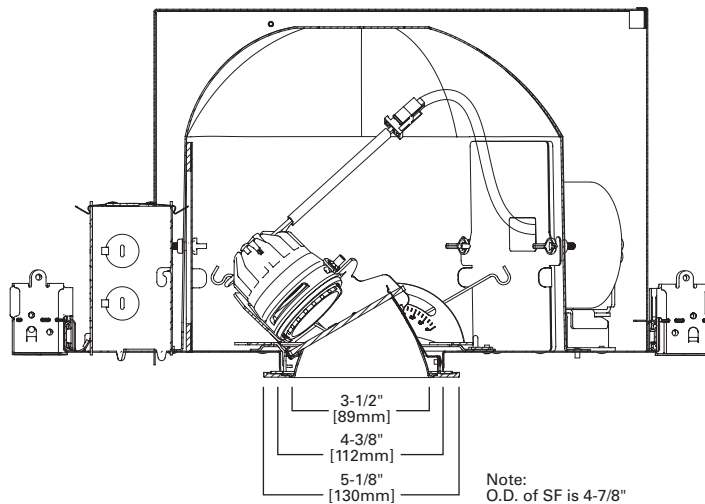
**P3MR
E3AASR**

**Directional Lens Angle Cut
3.5" Aperture**

**50W MR16
Tungsten-Halogen**



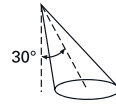
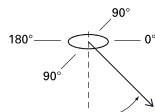
Energy Data		
Lamp Wattage	Input Watts	Input Current
20	23	0.19
35	41	0.34
37	42	0.35
42	47	0.39
50	57	0.48



To learn more visit:
www.soraa.com/wws/fixtures
for recommended lamp ratings.

Housing	Optical Element	Finishes	Options	Accessories
<p>P3MR=3.5" aperture IC, AT low voltage 50W MR16 housing platform w/integral 120V transformer</p> <p>P3MRDR20=3.5" aperture IC, AT low voltage 20W MR16 housing platform w/integral 120V transformer</p> <p>P3MRDR35=3.5" aperture IC, AT low voltage 35W MR16 housing platform w/integral 120V transformer</p> <p>P3MRDR37=3.5" aperture IC, AT low voltage 37W MR16 housing platform w/integral 120V transformer</p> <p>P3MRREMOTE=3.5" aperture IC, AT low voltage MR16 housing platform for remote transformer</p>	<p>E3AASR=3.5" aperture lens angle cut reflector</p>	<p>Alzak Finishes</p> <p>C=Specular Clear</p> <p>H=Semi-Specular Clear</p> <p>G=Gold</p> <p>WHH=Wheat Haze</p> <p>WH=Wheat</p> <p>WHH=Wheat Haze</p> <p>GP=Graphite</p> <p>GPH=Graphite Haze</p> <p>K=Cognac</p> <p>KH=Cognac Haze</p> <p>CC=Chocolate</p> <p>CCH=Chocolate Haze</p> <p>B=Black</p> <p>Painted Finishes</p> <p>MW=Matte white</p> <p>W=Gloss white</p>	<p>(Blank)=Metal trim ring, matte white</p> <p>SF=Self-flanged</p> <p>SFWF=Self-flanged, matte white flange</p>	<p>FMC3=Flush mount collar accessory</p> <p>PLE3=Plaster lip extender for up to 2" thick ceilings</p> <p>LSA16=Matte black lamp snoot accessory, for use with die cast lamp capsule</p> <p>LHEX=2-inch diameter matte black hex cell louver provides 45° cutoff</p> <p>LLNR=Skytek linear spread lens</p> <p>LSF=Solite lens</p> <p>LSPD=Crystal #73 prismatic spread lens</p> <p>LUV=Ultraviolet reducing lens</p> <p>L27K=2,700°K dichroic filter</p> <p>LLPINK=Light Pink</p> <p>LLSTRAW=Light Straw</p> <p>LDAY=Daylight Filter</p> <p>LPLAV=Pale Lavender</p> <p>LSPINK=Surprise Pink</p>

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 MR16/C/VNSP7 Beam Spread: 9° CBCP: 13,100	85°	0	0	6'	139	0.7	0.7	6'	68	1.2	0.8	3.5	2'	150	0.9	0.5	3.5	2'	482	0.4	0.3	2.0	
	75°	0	0	8'	78	1	1	8'	38	1.6	1.1	4.6	3'	67	1.3	0.8	5.2	3'	214	0.6	0.5	3.0	
	65°	0	0	10'	50	1.2	1.5	10'	24	2.1	1.3	5.8	4'	38	1.7	1.0	6.9	4'	120	0.8	0.6	4.0	
	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	
	45°	1152	1382																				
		Test # H21237			Test # H21232				Test # H21234					Test # H21234					Test # H21203				
OS Q37 MR16/IR/SP10 Beam Spread: 7°x5° CBCP: 8,200	85°	0	0	6'	303	0.9	0.9	6'	158	1.5	1.3	3.5	2'	303	1.3	0.7	3.5	2'	482	0.4	0.3	2.0	
	75°	0	0	8'	170	1.2	1.2	8'	89	2	1.7	4.6	3'	135	2.0	1.1	5.2	3'	214	0.6	0.5	3.0	
	65°	0	0	10'	109	1.6	1.6	10'	57	2.5	2.1	5.8	4'	76	2.6	1.4	6.9	4'	120	0.8	0.6	4.0	
	55°	284	284	12'6"	70	1.9	1.9	12'6"	36	3.1	2.7	7.2	5'	48	3.3	1.8	8.7	5'	77	1.0	0.8	5.0	
	45°	3225	2304																				
		Test # H21250			Test # H21253				Test # H21254					Test # H21254					Test # H21255				
PH Q45 MR16/IRC/SP8 Beam Spread: 27° CBCP: 2,400	85°	0	15719	6'	309	1	1	6'	152	1.5	1.4	3.5	2'	300	1.3	0.8	3.5	2'	722	0.7	0.7	2.0	
	75°	0	5293	8'	174	1.3	1.3	8'	86	2	1.9	4.6	3'	133	2.0	1.2	5.2	3'	321	1.0	1.0	3.0	
	65°	0	3242	10'	111	1.6	1.6	10'	55	2.5	2.4	5.8	4'	75	2.6	1.5	6.9	4'	181	1.3	1.3	4.0	
	55°	0	2389	12'6"	71	2	2	12'6"	32	3.3	3.1	7.2	5'	48	3.3	1.9	8.7	5'	116	1.7	1.6	5.0	
	45°	0	0																				
		Test # H21226			Test # H21223				Test # H21227					Test # H21227					Test # H21228				
GE Q50 MR16/C/NSP15 Beam Spread: 14° CBCP: 10,200	85°	1869	1869	6'	198	1.5	1.5	6'	129	1.8	1.8	3.5	2'	252	1.5	1.0	3.5	2'	639	0.8	0.7	2.0	
	75°	629	629	8'	11	2	2	8'	73	2.4	2.4	4.6	3'	112	2.2	1.5	5.2	3'	284	1.2	1.1	3.0	
	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	
	55°	284	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	
	45°	3916	1152																				
		Test # H21244			Test # H21240				Test # H21243					Test # H2143					Test # H21244				
GE Q50MR16/C/NFL25 Beam Spread: 25° CBCP: 3,000	85°	0	821	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°	0	277	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	
	65°	0	169	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	
	55°	125	250	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	
	45°	2227	1721																				
		Test # H 22408			Test # H21187				Test # H1193					Test # H21193					Test # H21185				
GE Q50MR16/C/FL40 Beam Spread: 40° CBCP: 1,700	85°	0	821	4'	99	2.4	2.3	4'	65	2.7	2.7	2.3	2'	100	1.8	1.7	3.5	2'	159	1.5	1.6	2	
	75°	0	277	7'	32	4.2	4.1	7'	21	4.8	4.8	4.0	3'	45	2.7	2.5	5.2	3'	71	2.3	2.4	3	
	65°	0	169	10'	16	6	5.9	10'	10	6.9	6.9	5.8	4'	25	3.6	3.3	6.9	4'	40	3	3.2	4	
	55°	125	250	12'6"	10	7.4	7.3	12'6"	7	8.6	8.6	7.2	5'	16	4.5	4.1	8.7	5'	25	3.8	4	5	
	45°	1316	2024																				
		Test # H22402			Test # H21201				Test # H21202					Test # H21202					Test # H21203				