

DESCRIPTION

Recessed 2.0" wide oval luminaire 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.

Splay

Die cast aluminum splay with 2" oval aperture. Can be installed flush mount with optional flush mount collar accessory.

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 damp locations. Restrictive airflow per ASTM-E283. Contains no mercury or lead and RoHS compliant.

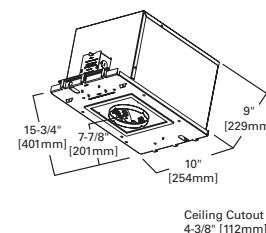


P3MR E3OVAL

Directional OVAL

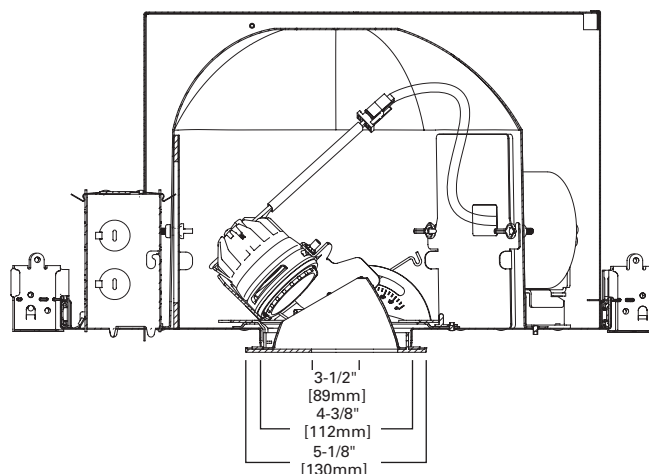
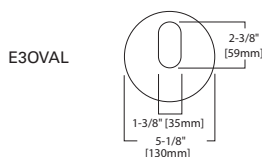
2" Aperture

50W MR16
Tungsten-Halogen



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

PINHOLE ELEMENT (PLAN VIEW)



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/www/fixtures
for recommended lamp ratings.

ORDERING INFORMATION

Housing	Optical Element	Flange Style and Finish 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>E3OVAL=2" oval aperture splay</p>	<p>(Blank)=Matte white die cast flange</p> <p>POL=Polished aluminum die cast flange</p> <p>RAW=Raw aluminum die cast flange</p> <p>SAL=Satin aluminum die cast 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 CB	D FC L W CB	D FC L W CB	D FC L W CB	D FC L W CB
GE Q50MR16/C/NSP15	85° 0 0	6' 154 1.3 1.3	6' 82 1.7 1.7 3.5	2' 171 1.4 0.9 3.5	2' 345 0.8 0.7 2
Lumens: 750	75° 0 0	8' 87 1.8 1.8	8' 46 2.3 2.3 4.6	3' 76 2.1 1.4 5.2	3' 153 1.2 1 3
Beam Spread: 15°	65° 0 0	10' 56 2.2 2.2	10' 30 2.8 2.8 5.8	4' 43 2.8 1.8 6.9	4' 86 1.6 1.3 4
CBCP: 9,500	55° 0 0	12' 6" 36 2.8 2.8	12' 6" 19 3.5 3.5 7.2	5' 27 3.5 2.3 8.7	5' 55 2 1.7 5
	45° 0 0	Test # H21242	Test # H21247	Test # H21247	Test # H21248
GE Q50MR16/C/NFL25	85° 0 0	6' 73 1.8 2.4	6' 38 2.6 2.3 3.5	2' 78 2.1 1.3 3.5	2' 148 1.1 1 2
Lumens: 884	75° 0 0	8' 41 2.4 3.2	8' 22 3.4 3.1 4.6	3' 35 3.2 1.9 5.2	3' 66 1.7 1.5 3
Beam Spread: 25°	65° 0 0	10' 26 3 4	10' 14 4.3 6 5.8	4' 20 4.3 2.5 6.9	4' 37 2.3 1.9 4
CBCP: 3,000	55° 0 0	12' 6" 17 3.8 5	12' 6" 9 5.4 4.9 7.2	5' 13 5.3 3.2 8.7	5' 24 2.8 2.4 5
	45° 0 0	Test # H21188	Test # H21197	Test # H21197	Test # H21196
GE Q50MR16/C/FL40	85° 0 0	6' 38 3.2 2.5	6' 22 3.1 3 3.5	2' 75 2 1.4 3.5	2' 101 1.6 1.3 2
Lumens: 800	75° 0 0	8' 21 4.2 3.4	8' 13 4.1 4 4.6	3' 33 3 2.1 5.2	3' 45 2.4 1.9 3
Beam Spread: 40°	65° 0 0	10' 14 5.3 4.2	10' 8 5.2 5.1 5.8	4' 19 4.1 2.8 6.9	4' 25 3.2 2.6 4
CBCP: 1,700	55° 0 0	12' 6" 9 6.6 5.3	12' 6" 5 6.5 6.3 7.2	5' 12 5.1 3.5 8.7	5' 16 4 3.2 5
	45° 0 1997	Test # H21206	Test # H21205	Test # H21205	Test # H21204
PH45MR16/IRC/SP8	85° 0 15719	6' 171 1 1	6' 79 1.5 1.5 3.5	2' 159 1.3 0.8 3.5	2' 324 0.7 0.6 2
Lumens: 1030	75° 0 5293	8' 96 1.4 1.4	8' 45 2.1 2 4.6	3' 70 2 1.2 5.2	3' 144 1.1 1 3
Beam Spread: 8°	65° 0 3242	10' 62 1.7 1.7	10' 29 2.6 2.5 5.8	4' 40 2.6 1.6 6.9	4' 81 1.4 1.3 4
CBCP: 16,000	55° 0 2389	12' 6" 39 2.3 2.3	12' 6" 18 3.2 3.1 7.2	5' 25 3.3 2 8.7	5' 52 1.8 1.6 5
	45° 0 0	Test # H21224	Test # H21225	Test # H21225	Test # H21226
GE Q42MR16/C/VNSP9	85° 0 0	6' 123 0.8 1.2	6' 64 1.3 1.3 3.5	2' 121 1.1 0.8 3.5	2' 246 0.6 0.6 2
Lumens: 575	75° 0 0	8' 69 1 1.6	8' 36 1.7 1.7 4.6	3' 54 1.6 1.1 5.2	3' 109 0.9 0.9 3
Beam Spread: 9°	65° 0 0	10' 44 1.3 2	10' 23 2.1 2.1 5.8	4' 30 2.2 1.5 6.9	4' 61 1.2 1.2 4
CBCP: 12,500	55° 0 0	12' 6" 28 1.6 2.5	12' 6" 15 2.6 2.7 7.2	5' 19 2.7 1.9 8.7	5' 39 1.5 1.5 5
	45° 0 0	Test # H21207	Test # H21208	Test # H21208	Test # H21209
OS Q37MR16/IR/SP/10	85° 0 0	6' 151 1.3 1.8	6' 87 1.8 1.6 3.5	2' 147 1.6 0.9 3.5	2' 329 1 0.7 2
Lumens: 900	75° 0 0	8' 85 1.8 2.4	8' 49 2.4 2.2 4.6	3' 65 2.4 1.3 5.2	3' 146 1.4 1 3
Beam Spread: 10°	65° 0 0	10' 54 2.2 3	10' 31 3 2.7 5.8	4' 37 3.1 1.8 6.9	4' 82 1.9 1.3 4
CBCP: 13,100	55° 0 0	12' 6" 35 2.8 3.8	12' 6" 20 3.8 3.4 7.2	5' 24 3.9 2.2 8.7	5' 53 2.4 1.7 5
	45° 0 0	Test # H21258	Test # H21257	Test # H21257	Test # H21256
GE Q20MR16/VNSP7	85° 0 0	6' 87 0.7 0.6	6' 38 0.8 0.9 3.5	2' 79 0.7 0.6 3.5	2' 172 0.4 0.4 2
Lumens: 200	75° 0 0	8' 49 0.9 0.8	8' 22 1.1 1.2 4.6	3' 35 1.1 0.8 5.2	3' 76 0.6 0.6 3
Beam Spread: 7°	65° 0 0	10' 31 1.1 1	10' 14 1.4 1.5 5.8	4' 20 1.5 1.1 6.9	4' 43 0.8 0.7 4
CBCP: 7,400	55° 0 0	12' 6" 20 1.4 1.3	12' 6" 9 1.7 1.8 7.2	5' 13 1.8 1.4 8.7	5' 28 1 0.9 5
	45° 0 0	Test # H21233	Test # H21236	Test # H21236	Test # H21239

Notes & Definitions:

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

• Beam spread is to 50% center beam candlepower (CBC P.)

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.

