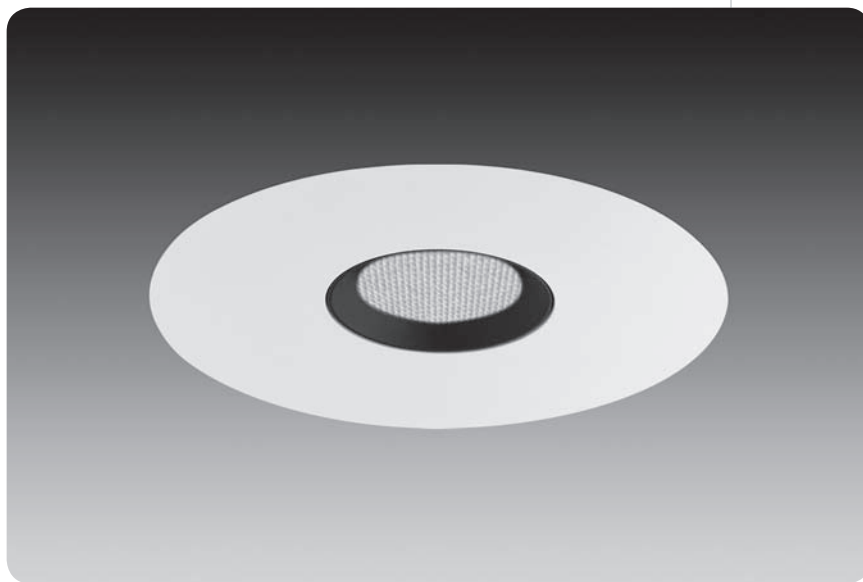


0-45° accent – pinhole with lens id®



Patent Pending

features

Trims available in Overlap flange or Flush mud-in for a seamless appearance.

Gloves Off™ hot aiming made simple with gear drive for both 45° vertical and 363° horizontal adjustment; Self locking.

Auto Memory remembers original lamp position after relamping. Lenses are independent of lamp, and remain undisturbed during relamping.

Perfect Fit™ installation process provides seamless integration in plaster, drywall and acoustical tiles, while maintaining optics in any ceiling thickness.

Adjustment mechanism provides for:

- easy relamping
- locking of both vertical and horizontal aiming
- lowers for easy lamp and lens access.

Smart Lock™ ring allows quick removal and re-assembly of trim components for field painting.

Standard white finish is field paintable.

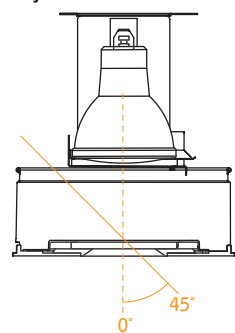
Interchangeable lamp and trim mechanisms allow for maximum flexibility, even after luminaire is installed.

lens accessories

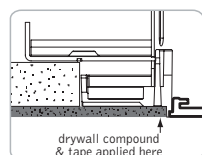
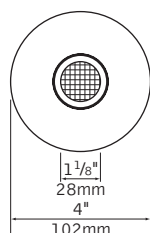


trim assembly

trim with adjustment mechanism

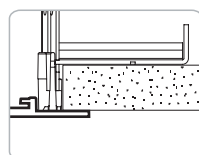
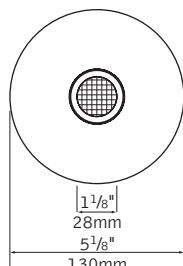


flush trim (drywall only)



ceiling cutout dimensions:
6 3/16"

overlap trim

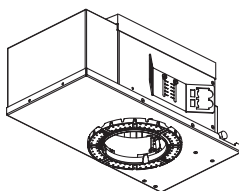


ceiling cutout dimensions:
4 11/16"

housing

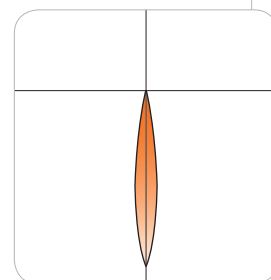
T/IC

14" x 7.625" x 6"h



performance

Accent Pinhole with Lens
CMH20MR16/830/SP12
2459 cd @ 0° (0° tilt)



Visit focalpointlights.com for complete photometric data.

July 2009

fixture:

project:

housing specifications

lamp

Ceramic Metal Halide 20W or 39W MR16 Lamp provides a crisp white light source, 3000K and 80CRI, with UV stop. It is a protected lamp for use in open fixture designs.

construction

(T) Thermally protected housing for new construction applications without direct contact with insulation. Unit is enclosed in a 20ga black painted CRS housing, which eliminates stray light into the plenum,. on a 20Ga CRS frame. T housing ships standard with butterfly brackets which mount to ½ emt or channel, vertically adjusts 2 inches. Bar hangers are an option and must be specified when ordering thermally protected housing. Transformer is accessible from below ceiling. Unit may be relamped from above. Fixture will not exceed 7.5 lbs.

(IC) Thermally protected for Insulated Ceiling housing for new construction applications with direct insulation contact. Unit is enclosed in a 20ga black painted CRS housing, which eliminates stray light into the plenum,. on a 20Ga CRS frame. IC housing ships standard with butterfly brackets which mount to ½ emt or channel, vertically adjusts 2 inches. Bar hangers are an option and must be specified when ordering thermally protected housing. Transformer is accessible from below ceiling. Unit may be relamped from above. Fixture will not exceed 7.5 lbs.

electrical

Ceramic Socket GX10 for Metal Halide lamp, with permanently joined socket wires. Lamp is held by twist and lock 5KVA socket, ensuring simple lamp insertion and removal.

Large junction box 2x4x5.5" with ½" and ¾" pryouts. UL listed for thru branch wiring, 4#12 90°C conductors.

Thermally isolated electronic ballast, replaceable from below, is mounted outside of the housing to ensure cool operation. Wiring compartment mounting provides additional thermal break from the lamp. 120 or 277V, M130 or M156 ANSI spec ballast consumes 26 or 45 watts and provides >90% PF, 20% THD and end of life shut down circuitry. 39W dimming ballast is available.

installation

Adjustable throat allows infinite adjustment for ½" to 1½" thick ceilings. Shipped in ½" ceiling position. For thicker ceilings consult factory.

Ceiling thickness adjustment sleeve locks with supplied ¼" hex driver.

Sleeve allows fine tuning of the housing for a perfect fit. Comes with laser/string alignment guides.

Housing ships with dust cover.

trim specifications

aesthetics

Diminutive black baffle minimizes brightness. Patterned glass above baffle provides smooth wash of light and does not show water spots. Glass is spring loaded for ease in pulling down trim for aiming and relamping.

Matte white finish may be used as a primer coat for field painting. Smart Lock™ ring allows disassembly for custom field painting.

adjustment mechanism

Auto Memory for relamping, lamp returns to preset aiming position

Mechanism is matte black finish and holds lamp and lenses independently.

Hot aiming with Philips screwdriver allows for 45° vertical tilt, and 363° rotation and locks into position. Mechanism pulls down for quick and easy relamping.

Vertical angle and horizontal rotation indicators display positioning.

Tempered soft focus lens and spacer plate supplied as standard.

Lens tray can hold up to two accessories, up to ¾" thick. Lenses remain undisturbed during relamping.

optics

50° cutoff to the lamp and the lamp image.

Tempered 2" diameter Solite lens held over aperture via radial spring.

construction

Trim stays captive to housing during relamping via torsion springs.

Torsion springs pull trim tight to the ceiling.

No visible fasteners within the trim.

Mechanical light traps eliminate light leaks.

Warp free die-cast aluminum faceplate, .040" thick flange on overlap versions.

labels

UL listed, Wet label standard.

No visible labels when trim is installed.

housing ordering

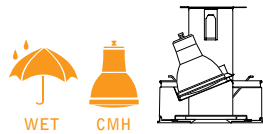
housing series		FM4
Metal Halide Housing	FM4	
lamp		MR
20W or 39W CMH MR16	MR	
ballast type		
M156 20W Electronic (120V and 277V)	M156U	
M130 39W Electronic (120V)	M1301	
M130 39W Electronic (277V)	M1302	
M130 39W Electronic Dimming (120V)	M1301D	
M130 39W Electronic Dimming (277V)	M1302D	
faceplate type		
Round Flush	RF	
Round Overlap	RO	
housing type		
Thermally Protected, Non-IC (39W only)	T	
Combined T and IC Rated (20W only)	IC	
factory options		
Bar Hangers	BH	
Chicago Plenum	CP	
3000K Lamp 12° Spot	LSP	
3000K Lamp 25° Spot	LFL	
3000K Lamp 40K Wide Flood	LWF	

trim ordering

trim aperture		D1
1½" Aperture	D1	
faceplate type		
Round Flush (drywall only)	RF	
Round Overlap	RO	
optic		PL
Pinhole Lens with Black Bevel	PL	
faceplate finish		
White	WH	
Black	BK	
Titanium Silver	TS	
Aluminum Raw	AL	
lens accessories		
(soft focus lens supplied as standard)		
Hex Louver	HL	
Linear Spread Lens	LSL	
Prismatic Spread Lens	PSL	
Sand Blasted Lens	SBL	
Clear Lens	CL	
UV Lens	UVL	

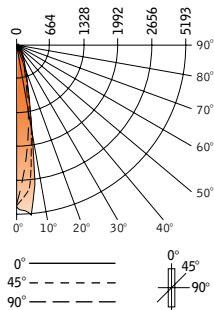
a complete unit consists of two line items, housing and trim
example: FM4-MR-M156U-RF-IC
D1-RF-PL-WH

rnd accent – pinhole with lens
id®



Luminaire: 20W CMH downlight, spot distribution with soft focus lens
Filename: D1RXPLMH20SP12_0.ies
Catalog #: D1-RX-PL-WH
Efficiency: 36%
Photometric Report #: 13577.0

CANDLEPOWER DISTRIBUTION



Spacing: .3
Criterion: .3

Vertical Angle	0°	22.5°	45°	67.5°	90°	Zonal Lumens
0°	2459	2459	2459	2459	2459	
5°	2594	2432	2175	1966	1728	170
15°	652	554	477	435	404	114
25°	106	92	81	80	77	36
35°	54	54	51	53	48	31
45°	11	15	14	12	8	7
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0

LUMEN SUMMARY

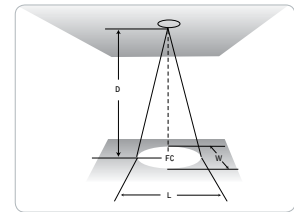
Zone	Lumens	% Lamp	% Fixt
0°-30°	319	31.9	89.6
0°-40°	350	35.0	98.2
0°-60°	356	35.6	100
0°-90°	356	35.6	100
Total Luminaire	356	35.6	100

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	21733	27660	15805
55°	0	0	0
65°	0	0	0
75°	0	0	0
85°	0	0	0

FOOTCANDLE VALUES

D	FC	L	W
6'	69	1.3'	1.3'
8'	39	1.7'	1.7'
10'	25	2.1'	2.1'
12'	17	2.5'	2.5'
14'	13	2.9'	2.9'



Footcandle results based on AG132; off the shelf lamp in fixture, with microprismatic lens; Reflectances=0/0/0; LLF=1

Go to www.focalpointlights.com for additional photometric data.