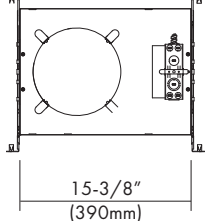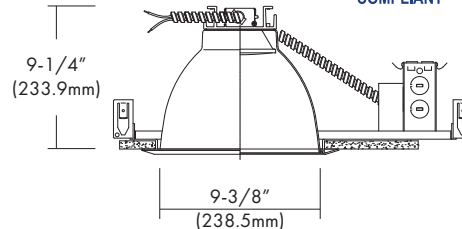# M910/MCLR9W

120V-277VAC LED 9", Non-IC, Commercial Flat Frame-in Kit
34W,43W LED, l 20-277V Input, Triac Dimmable Driver

9" Architectural LED

Buy American Act COMPLIANT

ENERGY STAR

Dimmable

CA Title 24

9-1/4" (233.9mm)

9-3/8" (238.5mm)

11-5/16" (287.2mm)

15-3/8" (390mm)

Ceiling Cut-out : 9-3/4"

DESCRIPTION

. 9" flat frame-in kits combined with LED module and integral reflector. This is designed for use in non-insulated ceiling. Insulation material must be kept a minimum of 3" from fixture. Provided in high efficacy LED with dimmable driver and the special optical diffusion allows high lumen transmission and light uniformity.

DESIGN FEATURES

9" LED Commercial Flat Frame-in Kit

LED Module & Trim
- Painted, extruded aluminum heat sink designed to facilitate efficient heat dissipation for superior thermal management and reliability.
- LED engine includes LED, heat sink and lens assembly.
- Heavy gauge aluminum reflector anodized in clear haze or white paint finishes. Multiple trim styles and finishes are available.

LED Driver
- Universal, 120~277V input, high efficacy drivers with dimming capability by ① a Triac 120V low voltage electronic dimmer switches or ② 0-10V, Triac & ELV dimmer switches.
- Drivers feature power factor >.90, THD <20% with integral thermal protection to sense over temperature or electrical issues.
- Driver mounts externally to the module to allow future replacement or upgrading if desired.
- Optional Lutron Hi-lume A-Series, LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)

Electrical Connection
- Attach supply line to existing junction box through one of the knockouts provided in junction box. The existing socket whip and ballast can be set aside above the ceiling or removed completely.

Retrokit Mounting
- Designed for use with most existing 9-1/2" - 10" aperture architectural incandescent, fluorescent and metal halide housings. Supplied with flexible metal conduit for connection to existing electrical junction box. Existing frame-in kits mounting via friction springs or clips.

Options
- Emergency battery back-up : Available in mounted to fixture or remote, adjacent to luminaire (consult with factory for space requirements).

Limited Warranty
- LED Module: 5 years/50K hours
- Product/Driver: 3 years

Listing
- cETLus Wet Location
- ENERGY STAR
- California Title 24

SPECIFICATION				
Input Voltage	120-277VAC			
Wattage (+/-5%)	14W	23W	30W	45W
Lumen (+/-5%)	1,355	2,160	2,796	4,271
Efficacy (LPW)	96.8	93.9	93.2	94.9
Beam Angle	63.2˚	66.5˚	66.6˚	63.3˚
CRI (Typical)	80, 90			
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K			
Dimming	0-10V, ELV & TRIAC Optional Lutron Drivers			
LED Module	5 yr/50K hr			
Environment	Wet Location			

⊙ Triac Approved Dimmers

* Lutron: NovaT (Ntelv 300&600)
　　　　　Diva (Dvelv-300P&303P)
* Leviton: Acenti: Ate06-1Lw
* Leviton Trimatron #705W (incandescent)

⊙ 0-10V Approved Dimmers

* Lutron: Nova® 0-10V : NTFTV
　　　　　Diva® 0-10V : DVTV
* Leviton: Decora 0-10V : IP710DL

Consult tech. service or factory for additional dimmers

* Provided: Easy-quick connector case
(patent pending)

IMAGE Arch Lighting

TRIM

*Wide beam reflector is standard. Also available narrow beam in reflector(consult with factory).
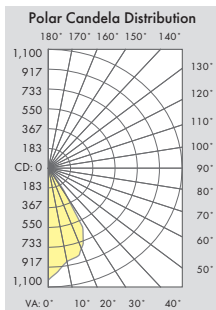
MCLR9W-HC
Specular Open Reflector

MCLR9W-B
Baffle w / Reflector

MCLR9W-BL
Baffled Lens w / Reflector

*All trims are rated for damp location and regressed lens trims are wet location listed.
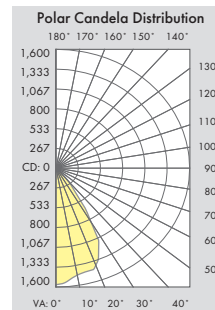
PHOTOMETRIC REPORT

* Contact Factory for IES File

Polar Candela Distribution
180° 170° 160° 150° 140°

		130°
1,100		
917		120°
733		110°
550		
367		100°
183		90°
CD: 0		
183		80°
367		70°
550		
733		60°
917		50°
1,100		

VA: 0° 10° 20° 30° 40°

Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	257.3 fc	2.5 ft
4.0ft	64.3 fc	4.9 ft
6.0ft	28.6 fc	7.4 ft
8.0ft	16.1 fc	9.8 ft
10.0ft	10.3 fc	12.3 ft
12.0ft	7.1 fc	14.8 ft

Beam Spread: 63.2°

[MCLR9W-HC-14-830]

Polar Candela Distribution
180° 170° 160° 150° 140°

		130°
1,600		
1,333		120°
1,067		
800		110°
533		100°
267		90°
CD: 0		
267		80°
533		70°
800		
1,067		60°
1,333		50°
1,600		

Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	394.6 fc	2.6 ft
4.0ft	98.6 fc	5.2 ft
6.0ft	43.8 fc	7.9 ft
8.0ft	24.7 fc	10.5 ft
10.0ft	15.8 fc	13.1 ft
12.0ft	11.0 fc	15.7 ft

Beam Spread: 66.5°

[MCLR9W-HC-23-830]
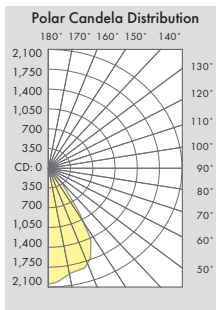
Polar Candela Distribution
180° 170° 160° 150° 140°

		130°
2,100		
1,750		120°
1,400		
1,050		110°
700		100°
350		
CD: 0		90°
350		80°
700		70°
1,050		
1,400		60°
1,750		50°
2,100		

Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	511.0 fc	2.6 ft
4.0ft	127.7 fc	5.3 ft
6.0ft	56.8 fc	7.9 ft
8.0ft	31.9 fc	10.5 ft
10.0ft	20.4 fc	13.1 ft
12.0ft	14.2 fc	15.8 ft

Beam Spread: 66.6°
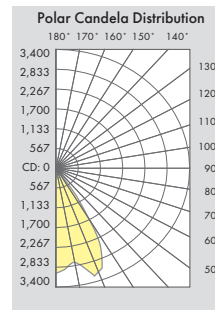
[MCLR9W-HC-30-830]

Polar Candela Distribution
180° 170° 160° 150° 140°

		130°
3,400		
2,833		120°
2,267		
1,700		110°
1,133		100°
567		
CD: 0		90°
567		80°
1,133		70°
1,700		
2,267		60°
2,833		50°
3,400		

Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	747.9 fc	2.5 ft
4.0ft	187.0 fc	4.9 ft
6.0ft	83.1 fc	7.4 ft
8.0ft	46.7 fc	9.9 ft
10.0ft	29.9 fc	12.3 ft
12.0ft	20.8 fc	14.8 ft

Beam Spread: 63.3°

[MCLR9W-HC-45-830]

Ordering Information

Housing		-Watts	-CRI	Color Temp.**	Driver*	Trim	-Reflector Finish**	Baffle Finish for MCLR9W B & BL	Optional Metal Trim Ring Finish
M910	=9" Non-IC, Commercial Flat Frame-in Down Light Kit	**-14** = 14W **-23** = 23W **-30** = 30W **-45** = 45W	**-8** = 80 **-9** = 90	**27** = 2700K **30** = 3000K **35** = 3500K **40** = 4000K	**Z10** = 120/277V, 0-10V Dimming **Z** = 120/277V, Tri-Mode (0-10V/Triac/ELV) ⬙LUTRON **LDE1** = Hi-lume 1% EcoSystem Fade to Black Dimming **LTE** = Hi-lume 1% 2-Wire Dimming 120V **PEQ0!** = Hi-lume Premier 0.1% EcoSystem FadeToBlack Dimming (For 23W or less only) * Option : Emergency (Non-IC only) **-EM** = Emergency Battery Backup	MCLR9W-HC MCLR9W-B MCLR9W-BL	**-HC** = Haze Clear **-WH** = White Painted	**-WH** = White **-BK** = Black	**-WH** = White Plastic Trim Ring (Standard) **-WMR** = White Metal Ring **-SN** = Satin Nickel **-CH** = Chrome **-SF** = Polished Self-Flange (for Open or Wall Wash Reflectors ONLY)
Example : **MCLR9W-30-840-Z**						**HC-WH**	** Consult factory for other Color Temperatures and Finishes		

IMAGE Arch Lighting