



# M9810

## Modular In-Grade Luminaire

### Monochromatic LED Single Lens

#### HIGHLIGHTS

- Factory-sealed LED lamp module and encapsulated power module
- Seven available color temperatures
- 0-10V Dimming
- Seven distributions
- Flow-through technology

**5**  
YEAR  
warranty



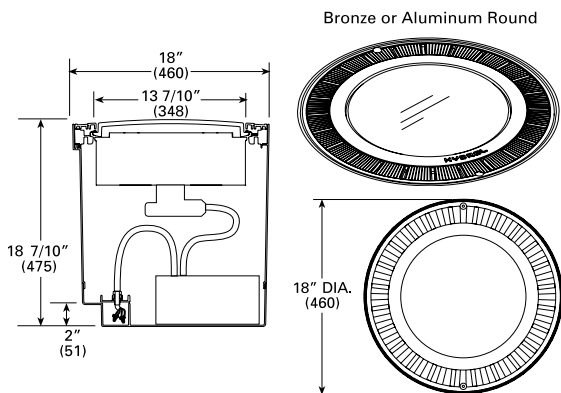
IP68



#### Specifications

Length:	18" 460 mm
Width:	13-7/10" 348 mm
Height:	18-7/10" 475 mm

#### DIMENSIONS

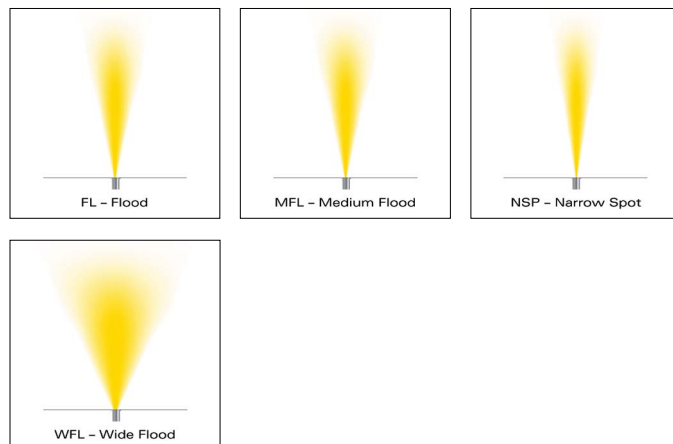


#### LUMEN PACKAGES

	NSP	MFL	FL	WFL	HSP	HFL	VWFL
Delivered Lumens	4,828	4,828	4,260	4,828	5,396	4,544	3,976
Watts	54	54	54	54	54	54	54
LPW	89	89	79	89	100	84	74

Note: Information based on WHT41K

#### STANDARD DISTRIBUTION



**ORDERING INFORMATION**

**EXAMPLE:** M9810 A LED WHT53K MVOLT NSP FLC 34B IHL LP

Model	Material	Lamp Type	LED Color	Voltage	Distribution	Lens
M9810	Round Single Lens A Aluminum B Bronze	LED	WHT30K White WHT41K White WHT53K White AMB Amber BLU Blue GRN Green RED Red	MVOLT	NSP Narrow Spot MFL Medium Flood FL Flood WFL Wide Flood VWFL Very Wide Flood HSP Horizontal Spot HFL Horizontal Flood	FLC <sup>1</sup> Flat Lens Clear FLC5 Flat Lens Clear, 5° Axial Spread

Conduit Entries	Accessories	Options	Lamp	Finish <sup>5</sup>	Listing
34B <sup>2</sup> 3/4" NPT Bottom 20B <sup>3</sup> M20 Bottom 25B <sup>3</sup> 25mm Bottom	<u>Internal</u> IHL Internal Honeycomb Louver <u>External<sup>4</sup></u> GS Glare Shield <u>Trim Rings</u> BTR Bronze Trim Ring	LDIM 0-10V Dimming	LP Lamp Included	BL Black BZ Bronze DDB Dark Bronze DNA Natural Alum. GN Green GR Gray SND Sand STG Steel Gray TVG Terra Verde Green WH White _Z <sup>6</sup> Zinc Undercoat (i.e. BLZ)	IEC International Electro-technical Commission For European format only

**ELECTRICAL LOAD**

Light Engines	Drive Current (mA)	System Watts	Current (A)			
			120	208	240	277
36 LED	700mA	54	0.45	0.26	0.23	0.19

**PROJECTED LED LUMEN MAINTENANCE**

Data references the extrapolated performance projections for the Fixture platform in a 25°C ambient, based on 13,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).  
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.00	0.99	0.98	0.96

**LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS**

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C / 32°F	1.02
10°C / 50°F	1.01
20°C / 68°F	1.00
25°C / 77°F	1.00
30°C / 86°F	0.99
40°C / 104°F	0.98

**SLIP RESISTANCE AND LOAD RATING**

M9800
<b>MAXIMUM LOAD RATING</b> Peak compression force of 4,750 lbs. (single lens).

- Notes:
- 1 FLC is the default lens if no option is chosen.
  - 2 34B is the default conduit if no option is chosen.
  - 3 For use with IEC only
  - 4 Options are mutually exclusive, choose only one.
  - 5 Finish only available on "A" door material.
  - 6 Add Zinc undercoat for harsh environments.

## PERFORMANCE DATA

### LUMEN OUTPUT

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

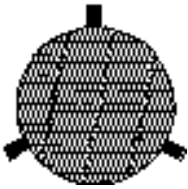
	Distribution	Nema Type	Beam Angle (50%) H x V	Field Angle (10%) H x V	Watts	LPW	Delivered Lumens
3000K 80CRI	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	54	53	2,840
	MFL	6 x 6	35.7 x 35.7	109 x 109	54	53	2,840
	FL	5 x 5	75.8 x 56.2	95.7 x 83.4	54	47	2,556
	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	54	53	2,840
	HSP	3 x 3	20.8 x 20.8	38.9 x 38.9	54	58	3,124
	HFL	4 x 3	40.5 x 15.6	60.8 x 30.4	54	50	2,698
	VWFL	7 x 7	110.2 x 110.2	141 x 141	51	44	2,272
4000K 70CRI	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	54	89	4,828
	MFL	6 x 6	35.7 x 35.7	109 x 109	54	89	4,828
	FL	5 x 5	75.8 x 56.2	95.7 x 83.4	54	79	4,260
	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	54	89	4,828
	HSP	3 x 3	20.8 x 20.8	38.9 x 38.9	54	100	5,396
	HFL	4 x 3	40.5 x 15.6	60.8 x 30.4	54	84	4,544
	VWFL	7 x 7	110.2 x 110.2	141 x 141	54	74	3,976
5000K 70CRI	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	54	89	4,828
	MFL	6 x 6	35.7 x 35.7	109 x 109	54	89	4,828
	FL	5 x 5	75.8 x 56.2	95.7 x 83.4	54	79	4,260
	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	54	89	4,828
	HSP	3 x 3	20.8 x 20.8	38.9 x 38.9	54	100	5,396
	HFL	4 x 3	40.5 x 15.6	60.8 x 30.4	54	84	4,544
	VWFL	7 x 7	110.2 x 110.2	141 x 141	54	74	3,976

OPERATING TEMPERATURE: -30°C Through 40°C

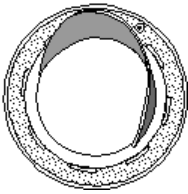
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**ACCESSORIES**

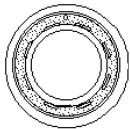
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**INTERNAL**

**INTERNAL HONEYCOMB LOUVERS — IHL**  
Hexagonal cell louver with 45° cut-off.

**EXTERNAL**

**QUARTER GLARE SHIELDS — GS**  
Rolled sheet aluminum or brass. 360° of adjustment on fixture door, with lock down. May be field installed to door as shown.  
(Not recommended for foot traffic areas.)



**BRONZE TRIM RINGS — BTR**  
A decorative escutcheon used when a high finish look is wanted. For finishing marble, tile or other installations. Door is flush with escutcheon.

## SPECIFICATIONS AND FEATURES

**DOOR MATERIAL:** Cast aluminum, cast bronze, round. Two stainless steel captive fasteners lock the Lamp Module into the Rough-In Section.

**ROUGH-IN SECTION:** Injection molded polymer cylinder with integral junction box for branch wiring (410 ccm - 25 in<sup>3</sup>), U.V. stabilized, impact and corrosion resistant for use in many environments. Houses Power Module, Lamp Modules and finishing components.

**LED MODULE:** Stainless steel, sealed and purged of all moisture with silicone rubber gasket, stainless steel clamp band and single fastener. Electrical connection to Lamp Module is done through submersible connector with gold-plated contacts. (LED Array Included)

**LIGHT TYPE:** LED: Monochromatic LEDs, 84 Input Watts. Lumen maintenance of individual light sources has been independently tested using IESNA LM80 standards.

**VOLTAGE:** MVOLT (120-277)

**FINISHED MODULE:** Single lens design includes door assembly with 360° Roto-Lock™ lamp module support ring. Module indexing provides easy maintenance and relamping without re-aiming. Active optical lenses are also available. Door trim locks into position with two stainless steel captive, tamper-resistant fasteners.

**POWER MODULE:** LED driver is encapsulated in a custom-heat dissipating epoxy resin to eliminate all moisture intrusion to the ballast. Provided with submersible rated cord/connector for connection to integral junction box and lamp module.

**CONDUIT ENTRIES:** Two 3/4" NPT bottom openings, standard. Box suitable for through branch wiring. J-Box volume 25 in<sup>3</sup>.

**ACCESSORIES:** Internal Glare Control, Glare Shields are available.

### GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act. Please refer to [www.acuitybrands.com/resources/buy-american](http://www.acuitybrands.com/resources/buy-american) for additional information.

**LISTING:** IP68, CSA, CSA<sub>US</sub>

**WARRANTY:** 5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/customer-support/terms-and-conditions](http://www.acuitybrands.com/support/customer-support/terms-and-conditions)

Consult factory for details.

**NOTE:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.