# JUNO

FIREWALL™ LED Downlight Series
4" Fire-Rated Integrated LED Downlight
New Construction

# **IC1LEDFW Series**





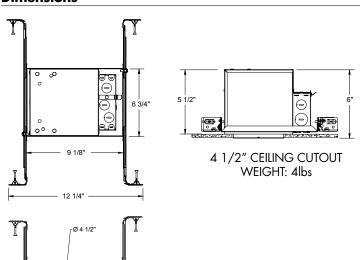








# **Dimensions**



Project:		
Fixture Type:		
Location:		
Contact/Phone:		

### **Product Features**

Dedicated small aperture 4" LED performance fire-rated downlight solution with integral light engine delivering up to 1400 lumens and compatible with a comprehensive selection of standard Juno trims

Patent pending integrated low smoke intumescent barrier

- Eliminates the need for installers to build additional boxes around fixtures to meet fire ratings
- Provides protection against the spread of heat and flames into the ceiling cavity for 1 hour or 2 hour fire ratings
- Reduces sound transmission between floors

Easy installation and servicability

- Low profile integrated LED downlight less than 6" in height
- Easy to handle compact size weighing only 4 lbs
- Installs into wood joists with Real Nail® 3 bar hangers

# **Applications**

- Residential and commercial applications including multi-family, hotels, assisted living, dormitories and other multi-level construction
- Shallow plenum, new construction
- IC rated for direct contact with insulation

# **Fire Resistance Specifications:**

- Conforms to UL263, ASTM STD E119 and CAN/ULC-S101 for US and Canadian installations
- May be used in fire resistance floor-ceiling and roof-ceiling designs per UL Fire Classified Directories CDHW and CDHW7
- 1 hour fire rated floor/ceiling and roof/ceiling gypsum assembly per UL Design No. L500 & P500
- 2 hour fire rated floor/ceiling gypsum assembly per UL Design No. L500, L505, L511, L536, L538, L541, L556, L577, M500, M510, M521 & M543

# **Performance**

Delivered Lumens	700L, 1000L, 1400L
LED Color Temperature	27K, 30K, 35K, 40K
Optional	30K, 700L <b>WarmDim</b> °
CRI	90+
Voltage	Dedicated 120V or MVOLT (120-277V)
Dimming	Forward/Reverse Phase or 0-10V
Optics	Narrow Flood or Wide Flood

For use with standard Juno downlight trims:

Baffle







Wall Wash





Decorative







**ORDERING INFORMATION** Housing and trim can be ordered together or separate, but will always ship separately.

Example: IC1LEDFW 10LM 30K 90CRI WFL 120 FRPC

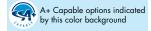
Series		Lumens		Color	Temperature	CRI		Distribut	ion	Voltage/Drive	•
IC1LEDFW	4" LED Firewall IC New	07LM	700 Nominal Lumens	27K	2700K	90CRI	90+ CRI	(blank)	Medium Flood (45°)	120 FRPC	120V Forward/Reverse Phase Cut, 5% dim
	Construction Downlight	10LM	1000 Nominal Lumens	30K	3000K			WFL	Wide Flood (65°)	MVOLT ZT10	Multi-Volt (120-277), 0-10V, 10% dim
		14LM	1400 Nominal Lumens	35K	3500K					MVOLT ZT1	Multi-Volt (120-277), 0-10V, 1% dim
				40K	4000K					MVOLT EZ10	Multi-Volt (120-277), eldoLED 0-10V, 10% dim
										MVOLT EZ1	Multi-Volt (120-277), eldoLED 0-10V, 1% dim

# **Warm**Dim

# WarmDim Option

Example: IC1LEDFW WD 07LM 30K 90CRI 120V FRPC

Series		Dyna	mic Feature	Lumens		Color	Temperature	CRI		Distributi	ion	Voltage/Driv	ver
ICILEDFW	4" LED Firewall IC New Construction Downlight	WD	WarmDim	07LM	700 Nominal Lumens	30K	3000K	90CRI	90+ CRI	(blank) WFL	Medium Flood (45°) Wide Flood (65°)	120 FRPC	120V Forward/Reverse Phase Cut, 5% dim



# **IC1LEDFW - Compatible Trims**

# **OPEN/DOWNLIGHT TRIMS**

Trim Series	Dimensions	Aperture	Catalog No.		Notes
		3-3/8"	14 BRZ	4" Downlight Baffle Trim - Black, Bronze	Analysis of Conversion Sin
	METALA		14 BBL	4" Downlight Baffle Trim - Black, Black Trim Ring	ENERGYSTOR 24
			14 BSC	4" Downlight Baffle Trim - Black, Satin Chrome	PART 6  JAN HOT SPECIAL FALL LIGHT BOUNDA HOUSE MINUTER  AND THE PART OF THE P
	511		14 BWH	4" Downlight Baffle Trim - Black, White Trim Ring	
Baffle	5"		14 WWH	4" Downlight Baffle Trim - White, White Trim Ring	
		3-3/8"	17 BWH	4" Downlight Cone Trim - Black Cone, White Trim Ring	CAN MAD IN THE
			17 CWH	4" Downlight Cone Trim - Clear Alzak® Cone, White Trim Ring	engy 24
			17 GWH	4" Downlight Cone Trim - Gold Cone, White Trim Ring	PART 6  JUNE HIGH STRICT HIS LIGHT BOOKE HOUSEHOUTE
			17 HZWH	4" Downlight Cone Trim - Haze Cone, White Trim Ring	
Cone	l 5"l		17 PTSC	4" Downlight Cone Trim - Pewter Cone, Satin Chrome Trim Ring	
			17 WHZBRZ	4" Downlight Cone Trim - Wheat Haze Cone, Bronze Trim Ring	
			17 WHZWH	4" Downlight Cone Trim - Wheat Haze Cone, White Trim Ring	
			17 WWH	4" Downlight Cone Trim - White Cone, White Trim Ring	

# **PINHOLE TRIM**

Trim Series	Dimensions	Aperture	Catalog No.	
		2″	13 WH	4" Pinhole with Integral Shield - White





Pinhole with Integral Shield





# IC1LEDFW - Compatible Trims

### HYPERBOLIC TRIM

Trim Series	Dimensions	Aperture	Catalog No.	
	- ^	3-3/8"	17HYP2 BWH	4" Downlight Cone Trim - Black Cone, White Trim Ring
			17HYP2 CWH	4" Downlight Cone Trim - Clear Alzak® Cone, White Trim Ring
	( ( ) )		17HYP2 HZWH	4" Downlight Cone Trim - Haze Cone, White Trim Ring
			17HYP2 WHZBRZ	4" Downlight Cone Trim - Wheat Haze Cone, Bronze Trim Ring
4" Hyperbolic 1	<del></del>		17HYP2 WHZWH	4" Downlight Cone Trim - Wheat Haze Cone, White Trim Ring
			17HYP2 WWH	4" Downlight Cone Trim - White Cone, White Trim Ring

### Notes





1 Hyperbolic trims not compatible with Warm Dim option.

# **WALL WASH TRIM**

Trim Series	Dimensions	Aperture	Catalog No.		Notes
			39 CWH 39 HZWH 39 WHZWH 39 WWH	4" Downlight Wall Wash Cone Trim - Clear Alzak®, White Trim Ring 4" Downlight Wall Wash Cone Trim - Haze, White Trim Ring 4" Downlight Wall Wash Cone Trim - Wheat Haze, White Trim Ring 4" Downlight Wall Wash Cone Trim - White, White Trim Ring	EMERSY STAR
4" Lensed Wall Wash	3		<b></b>	· · · · · · · · · · · · · · · · · · ·	

# **LENSED TRIMS**

Trim Series	Dimensions	Aperture	Catalog No.		Notes
			12 WWH 12 WSC 12 WBRZ	4" Frosted Lens with Clear Center Trim - White, White Trim Ring 4" Frosted Lens with Clear Center Trim - Perimeter Frosted Lens, Satin Chrome Trim Ring 4" Frosted Lens with Clear Center Trim - Perimeter Frosted Lens.	Wet Location  2 Trim is not ENERGY
Frosted Lens w/ Clear Center <sup>2</sup>	5" ──		12 112112	Bronze Trim Ring	STAR® Certified with Warm Dim and WFL options.





**Beveled Dome** Lensed<sup>2</sup>



4101 WH

4" Decorative Beleved Dome Lens Trim - White







2 Trim is not ENERGY STAR® Certified with Warm Dim and WFL options.



# **IC1LEDFW - Compatible Trims**

# **SQUARE TRIMS**

Trim Series	Dimensions	Aperture	Catalog No.	Notes
Square Downlight <sup>3</sup>	5"	2-5/32"	175Q BWH 4" Square Downlight Trim - Black, White Trim Ring 175Q HZWH 4" Square Downlight Trim - Haze, White Trim Ring 175Q WHZWH 4" Square Downlight Trim - Wheat Haze, White Trim Ring 175Q WWH 4" Square Downlight Trim - White, White Trim Ring	3 Trim is not ENERGY STAR® Certified or T24 with Warm Dim and WFL options.
Square Pinhole	5"	1-1/4″	13SQ WH 4" Square Pinhole Trim - White	





12SQ WH

 $4^{\prime\prime}$  Square Frosted Lens with Clear Center Trim - White, White Trim Ring







STAR® Certified or T24 with Warm Dim and WFL options.

**Square Frosted Lensed** 



# **Specifications**

# **LED Light Engine**

LED array attached to high purity aluminum, thermally conductive inner housing provides superior heat transfer to ensure long life of the LED • Replaceable light engine mounts directly to inner housing assembly and incorporates the latest generation, high lumen output LED array • LEDs are binned within a 3-step MacAdam Ellipse exceeding ENERGY STAR® requirements for superior fixture to fixture color uniformity • 2700K, 3000K, 3500K, or 4000K color temperatures available • 90 CRI minimum

Proprietary patented micro processor controlled light engine emulates dimming performance of incandescent light source • Replaceable light engine attached to high purity aluminum, thermally conductive inner housing provides superior heat transfer to ensure long life of the LEDs • 3000K color temperature at full lumen output and warms to 2000K • 90 CRI minimum throughout dimming range • Design covered under Patent US 8,710,754.

## **Optical System**

Two field interchangeable optics available in medium flood  $(45^\circ$  beam angle) and wide flood  $(65^\circ$  beam angle) • Computer-optimized reflector design with high reflectance finish coupled with a high transmission diffusing lens conceals the LEDs and produces uniform aperture luminance.

### **LED Driver**

Driver choice of dedicated 120 volt (120) driver or universal voltage (MVOLT) drivers that accommodate input voltages from 120-277 volts AC at 50/60Hz • Power factor > 0.9 at 120V input • 120 volt only driver is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • Universal voltage drivers are dimmable with the use of most 0-10V wall box dimmers • For a list of compatible dimmers, see JUNOICLED-DIM • Easily accessible from below the ceiling via patent pending integrated intumescent flaps.

# Housing

Designed for use in IC (insulated ceiling) or non-IC construction • Powder coated steel housing sealed for Air-Loc® compliance • Integrated patent pending continuous single layer low smoke intumescent barrier ships assembled in housing for fire resistance • Housing is vertically adjustable to accommodate up to a 1 1/2" ceiling thickness

### **Junction Box**

Pre-wired junction box provided with (6) ½" and (1) ¾" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire • UL listed and cUL listed for through-branch wiring, maximum of 6 #12 branch circuit conductors • Junction box provided with removable access plates • Knock-outs equipped with pryout slots • Quick connect electrical connectors supplied as standard for fast, secure installation.

### **Mounting Frame**

22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation • Pre-installed flame resistant Air-Loc gasket applied to

### **Real Nail 3 Bar Hangers**

Patented (US Patent D552,969) Real Nail® 3 bar hangers: telescoping system permits guick placement of housing any where within 24" O.C. joists

• Includes removable nail for repositioning of fixture in wood joist construction

### Certifications

ENERGY STAR® Certified when used with select trims • Certified to the high efficacy requirements of California T24 JA8-2019 with select trims • UL listed for U.S. and Canada through-branch wiring, damp locations • Lensed trims listed for wet location (covered ceiling) • UL and cUL • Conforms to UL 263, ASTM STD E119 and CAN/ULC-S101 • May be used in fire resistance floorceiling and roof-ceiling designs per UL Fire Classified Directories CDHW and CDHW7 • ASTM E283 certified Air-Loc

LED housing is designed to provide 50,000 hours of life • 5 year limited warranty on LED components.

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

Specifications subject to change without notice.

### **ELECTRICAL DATA**

Dedicated 120V Only Driver Option (120 FRPC)										
	700L	700L WD	1000L	1400L						
Input Power	8.6W (+/-5%)	10W (+/-5%)	11.6W (+/-5%)	17.3W (+/-5%)						
Input Current	0.07A	0.08A	0.10A	0.15A						
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz						
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)						
Minimum starting temp	-25°C	-20°C	-25°C	-25°C						

### **ELECTRICAL DATA**

# **Universal Voltage**

		MV	OLT ZT10, ZT1, EZ10	& EZ1			
	70	0L	10	00L	1400L		
	120V	277V	120V	277V	120V	277V	
Input Power	8.3W (+/-5%)	8.9W (+/-5%)	11.2W (+/-5%)	12.2W (+/-5%)	16W (+/-5%)	16.6W (+/-5%)	
Input Current	0.07A	0.03A	0.10A	0.05A	0.14A	0.06A	
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	
Minimum starting temp	-20°C	-20°C	-20°C	-20°C	-20°C	-20°C	