JUNO®

Project:	
Fixture Type:	
Location:	
Contact/Phone:	

6" TC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

TC22LED (G4 09LM) RECESSED HOUSING



LENSED TRIMS

PRODUCT DESCRIPTION

Dedicated LED new construction housing with integral light engine \bullet Shallow housing allows for fit in 2 x 6 construction \bullet TC housing design for use in non-insulated areas \bullet If installed where insulation is present, the insulation must be pulled back 3" from all sides of the TC housing LED housing is designed to provide 50,000 hours of life and is compatible with many standard Juno trims \bullet 5 year limited warranty on LED

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury
- Comparable light output to 26W compact fluorescent while consuming only18W*

PRODUCT SPECIFICATIONS

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

Optical System Computer-optimized reflector design with high reflectance white finish coupled with a high transmission diffusing lens conceals the LEDs and produces uniform aperture luminance • Wide flood (>70°) distribution shipped as standard with optional optic accessories available and sold separately.

Aesthetic Trim Selections Compatible with wide selection of existing Juno trims

• Shadow free, knife edge design blends seamlessly into ceiling.

LED Driver Universal voltage drivers that accommodate input voltage from 120-277 volts AC at 50/60Hz are available and dimmable with the use of most 0-10V dimmers • Power factor > 0.9 at 120V input • Optional Lutron Hi-Lume® A-Series driver accommodates 120-277 volts AC at 50/60Hz • Mounted between the j-box and housing for easy access and cool operation • For a list of compatible dimmers, see JUNOTCLED-DIM.

Emergency Battery Option Battery factory assembled to housing with remote mounted test switch included • Drives LED array for 90 minutes to meet Life Safety Code (NFPA-LSC), National Electrical Code (NEC) and UL requirements • Provides 50% light output in emergency mode.

Life Rated for 50,000 hours at 70% lumen maintenance.

Labels UL listed for U.S. and Canada through-branch wiring, damp locations
■ Union made ■ UL and cUL listed ■ Trim are wet location approved for covered ceiling applications.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Specifications subject to change without notice.

HOUSING FEATURES

Housing Designed for use in TC applications (non-insulated) • Aluminum housing • Housing is vertically adjustable to accommodate up to a 2" ceiling thickness.

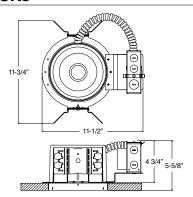
Junction Box Pre-wired junction box provided with (5) ½" and (1) ¾" knockouts and ground wire, UL listed and cUL listed for through-branch wiring, maximum 8 No. 12 AWG 90° C branch circuit conductors (4 in, 4 out) • Junction box provided with removable access plates • Knockouts equipped with pryout slots.

Mounting Frame 16-gauge galvanized steel mounting ring equipped with vertically adjustable mounting brackets that accept ½" conduit or "C" channels (HB26 or HB50), linear flat bars (LB27) or Patented (US Patent D552,969) Real Nail® 3 bar hangers (HB1).

*Nominal input wattage with universal voltage driver under stable operating conditions

DIMENSIONS





67/8" CEILING CUTOUT

ELECTRICAL DATA

STANDARD UNIVERSAL VOLTAGE DRIVER (MVOLT EZ10, MVOLT ZT10, MVOLT EZ1 and MVOLT ZT1)

	120V	277V
Input Power	16.1W (+/-5%)	16.9W (+/-5%)
Input Current - Max	0.14A	0.06A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15,	FCC Title 47 CFR, Part 15,
	Class B (residential)	Class B (residential)
Minimum starting temp	-20°C (-40°F)	-20°C (-40°F)

UNIVERSAL VOLTAGE DRIVER WITH EMERGENCY OPTION (MVOLT ZT10 BR, EZ10 BR, ZT1 BR and EZ1 BR)

	120V	277V
Input Power	18.9W (+/-5%)	19.6W (+/-5%)
Input Current - Max	0.16A	0.07A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15,	FCC Title 47 CFR, Part 15,
	Class A (Commercial)	Class A (Commercial)
Minimum starting temp	0°C (32°F)	0°C (32°F)

LUTRON HI-LUME® LED DRIVER (ECOD)

LUIRON HI-LUME' LED DRIVER (ECOD)					
	120V	277V			
Input Power	17.8W (+/-5%)	17.8W (+/-5%)			
Input Current - Max	0.15A	0.06A			
Frequency	50/60Hz	50/60Hz			
EMI/RFI	FCC Title 47 CFR, Part 15,	FCC Title 47 CFR, Part 15,			
	Class A (Commercial)	Class A (Commercial)			
Minimum starting temp	0°C (32°F)	0°C (32°F)			

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

Example: TC22LED G4 O9LM 27K 90CRI MVOLT ZT BR

Series		Gene	ration	Lumens		Color	Temperature	CRI		Voltage/Drive	
TC22LED	6" LED Downlight Non-IC Rated	G4	Generation 4	09LM	900 Nominal Lumens	27K	2700K	90CRI	90+ CRI	MVOLT ZT10	Multi-Volt (120-277), 0-10V, 10% dim
	Housing					30K	3000K			MVOLT ZT1	Multi-Volt (120-277), 0-10V, 1% dim
						35K	3500K			MVOLT EZ10	Multi-Volt (120-277), eldoLED 0-10V, 10% dim
						40K	4000K			MVOLT EZ1	Multi-Volt (120-277), eldoLED 0-10V, 1% dim
										MVOLT ECOD	Multi-Volt (120-277), Lutron Hi-Lume EcoSystem, 1% Dimming

Emer	gency Battery	Territory		
BR	Emergency Battery	СР	Chicago Plenum	

Note: Chicago Plenum (CP) is not available with emergency option (BR)
Note: Lutron driver (MYOLT ECOD) is not available with emergency battery pack (BR)



Trim/Description



20 WH 6" Lensed Albalite Trim - White 20 PW 6" Lensed Albalite Trim - Plastic White



21 WH 6" Lensed Drop Opal Trim - White
21 PW 6" Lensed Drop Opal Trim - Plastic White



22 WH 6" Lensed Fresnel Trim - White



239 WH* 6" Lensed Frosted Lens Trim - White



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 242 WH
 6" Lensed Frosted Lens with Clear Center Trim - White

 242 SC
 6" Lensed Frosted Lens with Clear Center Trim - Soltin Chrome

 242 BRZ
 6" Lensed Frosted Lens with Clear Center Trim - Bronze



2330 WWH * 6" Lensed Boffle with Regressed Frosted Dome Lens Trim - White, White Trim Ring
2330 BWH * 6" Lensed Boffle with Regressed Frosted Dome Lens Trim - Black, White Trim Ring

Trim Size: 2330 - 73/8" O.D.; 239, 242 - 75/8" O.D.; 20, 21, 22 - 8" O.D. Note: In Canada when insulation is present, Type IC fixtures must be used.

UL Listed for use in wet location.

Accessories (ordered separately)

Catalog Number	Description	
HB1	Two 13 1/2" - 25" Real Nail® 3 bar hangers	
HB26	Two 26" C-channel bar hangers	
HB50	Two 50" C-channel bar hangers	
LB27	Two 27" linear bar hangers	
LEDOPTICG3 MFL	Medium Flood Optic (50°)	
LEDOPTICG3 NFL Narrow Flood Optic (37°)		
LEDOPTICG3 SP	Spot Optic (10°)	

 $[\]ensuremath{^\star}$ Do not use reflector shipped with trim for LED housing.

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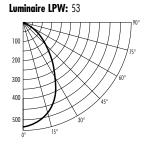
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PHOTOMETRICS

PHOTOMETRIC REPORT

Test Report #: PT10111804R Catalog No: TC22LED G4 09LM 35K with 239 WH Trim and Standard Wide Flood Optic Luminaire Spacing Criterion: 1.02



CANDLEPOWER DISTRIBUTION (Candelas)

(Carideias)				
Degrees				
Vertical	0°			
0	543			
5	536			
15	493			
25	405			
35	276			
45	161			
55	95			
65	56			
75	32			
85	7			
90	0			
Multiplier:	27K - 0.93 30K - 0.99			

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Ceiling 80	% Wall 50	0% Floor 2	:0%
Spacing	RCR1	RCR3	RCR5
4.0′	57	46	38
5.0′	37	29	24
6.01	25	20	17
7.0′	21	17	14
8.0′	16	13	11
9.01	12	10	8
10.0′	9	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture	
0 - 30°	374	N/A	43.6	
0 - 40°	546	N/A	63.7	
0 - 60°	758	N/A	88.5	
0-90°	857	N/A	100.0	

INITIAL FOOTCANDLES

(One Unit, 16.1W , 70.8° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	33.9	5.7′
6	15.1	8.5'
8	8.5	11.4′
10	5.4	14.2′

LUMINANCE (Average cd/m²)

	Average 0°	
Degrees	Luminance	
45	12472	
55	9035	
65	7314	
75	6674	
85	4173	

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.