

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

5" TC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

TC20LED (G4 14LM) RECESSED HOUSING



LENSED TRIMS

PRODUCT DESCRIPTION

Dedicated LED new construction housing with integral light engine • Shallow housing allows for fit in 2 x 6 construction • TC housing design for use in non-insulated areas • 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 • 5 year limited warranty on LED components.

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury
- Comparable light output to 32W compact fluorescent while consuming 20W*

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 wall box 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 i-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 40% 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.

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.

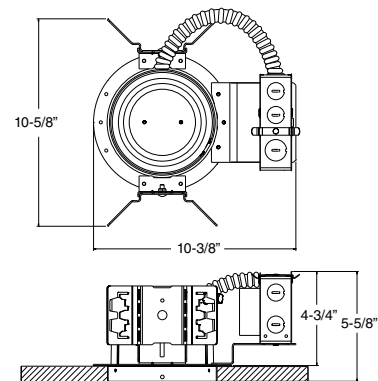
Junction Box Pre-wired junction box provided with (5) 1/2" and (1) 3/4" knockouts and ground wire, UL listed and cUL listed for through-branch wiring, maximum 8 No. 12 AWG 90° C branch circuit conductors (4 in, 4 out) • Junction box provided with removable access plates • Knockouts equipped with pryout slots.

Mounting Frame 16-gauge galvanized steel mounting ring equipped with vertically adjustable mounting brackets that accept 1/2" 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



5 5/8" CEILING CUTOUT

ELECTRICAL DATA

STANDARD UNIVERSAL VOLTAGE DRIVER

(MVOLT EZ10, MVOLT ZT10, MVOLT EZ1 and MVOLT ZT1)

	120V	277V
Input Power	15.6W (+/-5%)	16.3W (+/-5%)
Input Current - Max	0.13A	0.06A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, 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	18.4W (+/-5%)	19.1W (+/-5%)
Input Current - Max	0.16A	0.07A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class A (Commercial)	FCC Title 47 CFR, Part 15, Class A (Commercial)
Minimum starting temp	0°C (32°F)	0°C (32°F)

LUTRON HI-LUME® LED DRIVER (MVOLT ECOS3)

	120V	277V
Input Power	17.2W (+/-5%)	17.4W (+/-5%)
Input Current - Max	0.14A	0.07A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class A (Commercial)	FCC Title 47 CFR, Part 15, Class A (Commercial)
Minimum starting temp	0°C (32°F)	0°C (32°F)

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TC20LED (G4 14LM) RECESSED HOUSING LENSED TRIMS

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

Example: TC20LED G4 14LM 27K 90CRI MVOLT ZT BR

Series	Generation	Lumens	Color Temperature	CRI	Voltage/Driver
TC20LED 5" LED Downlight Non-IC Housing	G4 Generation 4	14LM 1400 Nominal Lumens	27K 2700K	90CRI 90+ CRI	MVOLT ZT10 Multi-Volt (120-277), 0-10V, 10% dim
			30K 3000K		MVOLT ZT1 Multi-Volt (120-277), 0-10V, 1% dim
			35K 3500K		MVOLT EZ10 Multi-Volt (120-277), eidoLED 0-10V, 10% dim
			40K 4000K		MVOLT EZ1 Multi-Volt (120-277), eidoLED 0-10V, 1% dim
					MVOLT ECOS3 Multi-Volt (120-277), Lutron Hi-Lume A series 3 wire fluorescent controls and Lutron Ecosystem

Emergency Battery	Territory
BR Emergency Battery	CP Chicago Plenum

Note: Chicago Plenum (CP) is not available with emergency option (BR)
Note: Lutron driver (MVOLT ECOS3) is not available with emergency battery pack (BR)



A+ Capable options indicated by this color background

Trim/Description



- 210N WH *** 5" Lensed Flat Glass Shower Trim - White
210N SC * 5" Lensed Flat Glass Shower Trim - Satin Chrome
210N ABZ * 5" Lensed Flat Glass Shower Trim - Classic Aged Bronze



- 212N WH *** 5" Lensed Frosted Lens with Clear Center Trim - White
212N SC * 5" Lensed Frosted Lens with Clear Center Trim - Satin Chrome
212N ABZ 5" Lensed Frosted Lens with Clear Center Trim - Classic Aged Bronze



- 2130 WWH *** 5" Lensed Baffle with Regressed Frosted Dome Lens Trim - White Baffle, White Trim Ring
2130 BWH * 5" Lensed Baffle with Regressed Frosted Dome Lens Trim - Black Baffle, Black Trim Ring



- 5101 ABZ *** 5" Lensed Beveled Frame with Frosted Dome Lens Trim - Classic Aged Bronze
5101 SC * 5" Lensed Beveled Frame with Frosted Dome Lens Trim - Satin Chrome
5101 WH * 5" Lensed Beveled Frame with Frosted Dome Lens Trim - White

UL Listed for use in wet location.

* Do not use reflector shipped with trim for LED housing.

Trim Size: 210, 212, 2130 - 6 1/4" O.D.; 5101 - 6 1/2" O.D.

Note: In Canada when insulation is present, Type IC fixtures must be used.

JUNO IC housings meet IECC Energy Code requirements per ASTM E283.



Air-Loc® rated trims are pre-gasketed for minimum air leakage with IC housings.

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°)

To order, specify catalog number.

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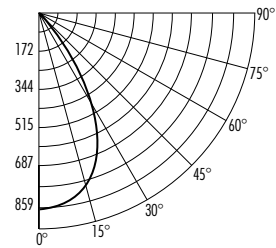
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PHOTOMETRICS

PHOTOMETRIC REPORT

Test Report#: PT10112703R
Catalog No: TC20LED G4 14LM 35K 90CRI
MVOLT with 210 WH Lensed Trim and Standard
Wide Flood Optic

Luminaire Spacing Criteria: 0.92
Luminaire LPW: 64



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	859
5	850
15	759
25	564
35	299
45	146
55	77
65	43
75	22
85	5
90	0

Multiplier: 27K - 0.93
30K - 0.97
40K - 1.02

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)
Ceiling 80%, Wall 50%, Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	67	56	47
5.0'	43	36	30
6.0'	30	25	21
7.0'	24	20	17
8.0'	19	16	13
9.0'	15	12	10
10.0'	11	9	8

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	547	N/A	54.8
0-40°	738	N/A	73.9
0-60°	925	N/A	92.7
0-90°	998	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 15.6W, 59.9° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	53.7	4.6
6	23.9	6.9
8	13.4	9.2
10	8.6	11.5

LUMINANCE (Average cd/m²)

Degrees	Average 0° Luminance
45	16261
55	10613
65	8002
75	6795
85	4656

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.