



Project: \_\_\_\_\_

Fixture Type: \_\_\_\_\_

Location: \_\_\_\_\_

Contact/Phone: \_\_\_\_\_

# 5" TC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

TC1420LED4 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 4100K 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 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 driver that accommodates input voltage from 120-277 volts AC at 50/60Hz is standard and is 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 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 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.

Product specifications subject to change without notice.

## HOUSING FEATURES

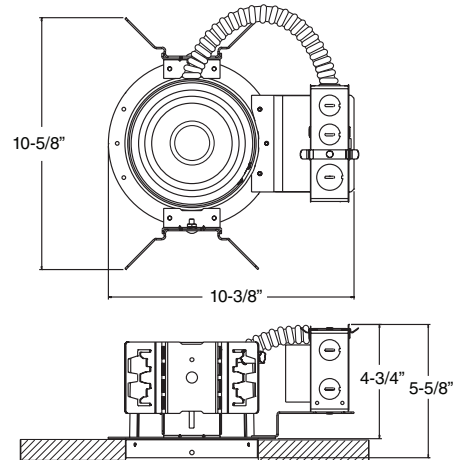
**Housing** Designed for use in TC applications (non-insulated) • Aluminum housing • Housing is vertically adjustable to accommodate up to a 2" ceiling thickness.

**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 (HB-26 or HB-50), linear flat bars (LB-27) or Patented (US Patent D552,969) Real Nail® 3 bar hangers (HB-1).

\*Nominal input wattage @ 120V with standard universal voltage driver under stable operating conditions

## DIMENSIONS



5 5/8" CEILING CUTOUT

## ELECTRICAL DATA

### STANDARD UNIVERSAL VOLTAGE DRIVER (-U)

	120V	277V
Input Power	20.2W (+/-5%)	20.7W (+/-5%)
Input Current - Max	0.17A	0.08A
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	-40°C (-40°F)	-40°C (-40°F)

### UNIVERSAL VOLTAGE DRIVER WITH EMERGENCY OPTION (-UBR)

	120V	277V
Input Power	23W (+/-5%)	23.5W (+/-5%)
Input Current - Max	0.22A	0.13A
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 (-L)

	120V	277V
Input Power	19.8W (+/-5%)	19.8W (+/-5%)
Input Current - Max	0.17A	0.08A
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 WITH EMERGENCY OPTION (-LBR)

	120V	277V
Input Power	22.6W (+/-5%)	22.6W (+/-5%)
Input Current - Max	0.21A	0.12A
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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## TC1420LED4 RECESSED HOUSING LENSED TRIMS

**ORDERING INFORMATION:** Housing, trim and accessories each ordered separately.

Example: **TC1420LED4-27K-UBR**

Catalog No.	Color Temp.	Voltage	Options
<b>TC1420LED4</b>	<b>27K</b> 2700K <b>3K</b> 3000K <b>35K</b> 3500K <b>41K</b> 4100K	<b>U</b> Universal Voltage 120-277V (0-10V dimming) <b>L</b> Lutron Hi-Lume 3-wire Dimming Ecosystem® Compatible	<b>BR</b> <sup>1</sup> Emergency Battery Back-up w/Remote Switch <b>CP</b> Chicago Plenum Chicago Plenum is not available with emergency option

Notes: <sup>1</sup> Not ENERGY STAR® Qualified.






Example: **HB-26**

### Accessories

Cat. #	Description
<b>HB-1</b>	Two 13 1/2" - 25" Real Nail® 3 bar hangers
<b>HB-26</b>	Two 26" C-channel bar hangers
<b>HB-50</b>	Two 50" C-channel bar hangers
<b>LB-27</b>	Two 27" linear bar hangers

Cat. #	Description
<b>LEDOPTICG3-M</b>	Medium Flood Optic (50°)
<b>LEDOPTICG3-N</b>	Narrow Flood Optic (37°)
<b>LEDOPTICG3-S</b>	Spot Optic (10°)

Example: **2130W-WH**

Trim/Description	
	<b>210N-WH*</b> <b>210N-SC*</b> <b>210N-ABZ*</b> Flat Glass Shower Trim
	<b>212N-WH*</b> <b>212N-SC*</b> <b>212N-ABZ*</b> Frosted Lens with Clear Center
	<b>2130W-WH*</b> White Baffle Regressed Frosted Dome Lens
	<b>2130B-WH*</b> Black Baffle Regressed Frosted Dome Lens
	<b>5101-ABZ*</b> <b>5101-SC*</b> <b>5101-WH*</b> Beveled Frame - Frosted Dome Lens

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.

Trim Finish: ABZ - Classic Aged Bronze, SC - Satin Chrome, WH - White

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

### PHOTOMETRIC REPORT

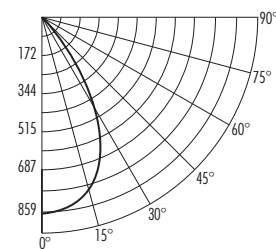
Test Report#: PT10112703R

Catalog No: TC1420LED4-35K-U

with 210-WH Lensed Trim and Standard Wide Flood Optic

Luminaire Spacing Criteria: 0.92

Luminaire LPW: 49



### 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 3K - 0.97 41K - 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, 20.2W, 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.