



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

5" TC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

TC1420LED4 RECESSED HOUSING
OPEN 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 • Deep regression of lens produces a low glare, efficient system that can produce over 1400 lumens with select trims (see page 2 for details) using 20W* • 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 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 ENERGY STAR® Qualified when used with select baffle and cone trims • 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

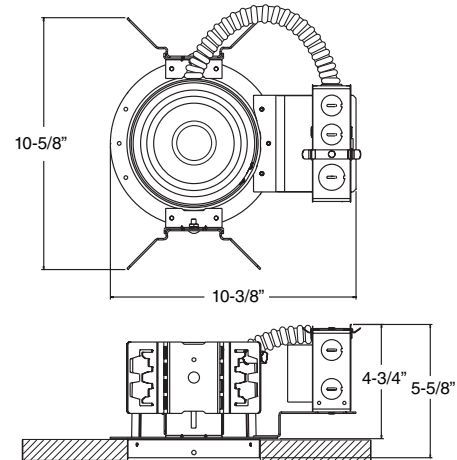
Housing Designed for use in TC applications (non-insulated) • Aluminum housing • Housing is vertically adjustable to accommodate up to a 2" ceiling thickness.

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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ORDERING INFORMATION: Housing, trim and accessories each ordered separately.
Example: **TC1420LED4-27K-UBR**

Catalog No.	Color Temp.	Voltage	Options
TC1420LED4	27K 2700K 3K 3000K 35K 3500K 41K 4100K	U Universal Voltage 120-277V (0-10V dimming) L1 Lutron Hi-Lume 3-wire Dimming Ecosystem® Compatible	BR1 Emergency Battery Back-up w/Remote Switch CP2 Chicago Plenum Chicago Plenum is not available with emergency option

Example: **HB-26**

Accessories

Cat. #	Description	Cat. #	Description
HB-1	Two 13 1/2" - 25" Real Nail® 3 bar hangers	LEDOPTICG3-M	Medium Flood Optic (50°)
HB-26	Two 26" C-channel bar hangers	LEDOPTICG3-N	Narrow Flood Optic (37°)
HB-50	Two 50" C-channel bar hangers	LEDOPTICG3-S	Spot Optic (10°)
LB-27	Two 27" linear bar hangers	TR5-ABZ2	Trim Ring - Classic Age Bronze
		TR5-BL2	Trim Ring - Black
		TR5-SC2	Trim Ring - Satin Chrome
		TR5-WH2	Trim Ring - White

Example: **205W-WH**

Trim/Description
205W-WH White Baffle
205B-WH1 Black Baffle
205B-SC1 Black Baffle
205B-ABZ1 Black Baffle
204C-WH Cone in Clear Alzak®
204G-WH Cone in Gold Alzak®
204B-WH1 Cone in Black Alzak®
204PT-SC Cone in Pewter Alzak®
204W-WH Cone in Gloss White
204HZ-WH Cone in Haze
204WHZ-WH Cone in Wheat Haze
204WHZ-ABZ Cone in Wheat Haze

Notes: ¹ Not ENERGY STAR® Qualified.² Trim ring compatible with 204 and 205 trims.

Trim Size: 6 1/4" O.D.

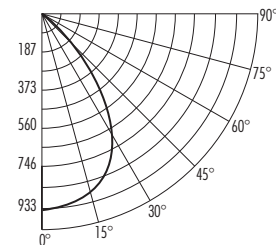
Trim Finish: ABZ - Classic Aged Bronze, SC - Satin Chrome, WH - White.

Alzak is a registered trademark of Alcoa Corp.

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

PHOTOMETRIC REPORT

Test Report#: PT10141703R
Catalog No: TC1420LED4-35K-U
with 205W-WH White Baffle Trim and
Standard Wide Flood Optic
Luminaire Spacing Criteria: 1.06
Luminaire LPW: 71



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	933
5	929
15	889
25	773
35	518
45	232
55	128
65	72
75	43
85	10
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'	97	79	67
5.0'	62	51	43
6.0'	43	35	30
7.0'	35	28	24
8.0'	28	23	19
9.0'	21	17	14
10.0'	16	13	11

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	691	N/A	48.0
0-40°	1010	N/A	70.2
0-60°	1311	N/A	91.1
0-90°	1439	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 20.2W, 72.8° Beam)

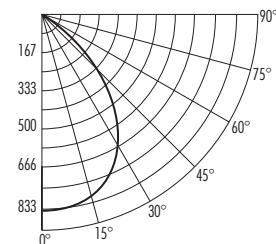
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	58.3	5.9
6	25.9	8.8
8	14.6	11.8
10	9.3	14.7

LUMINANCE (Average cd/m²)

Degrees	Average 0° Luminance
45	31114
55	21096
65	16101
75	15622
85	10749

PHOTOMETRIC REPORT

Test Report#: 25984R
Catalog No: TC1420LED4-35K-U
with 204C-WH Clear Alzak Trim and
Standard Wide Flood Optic
Luminaire Spacing Criteria: 1.20
Luminaire LPW: 76



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	833
5	828
15	798
25	750
35	613
45	332
55	171
65	82
75	14
85	0
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'	104	85	70
5.0'	67	54	45
6.0'	46	38	31
7.0'	37	31	25
8.0'	30	24	20
9.0'	23	18	15
10.0'	17	14	11

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	649	N/A	42.1
0-40°	1025	N/A	66.4
0-60°	1440	N/A	93.3
0-90°	1543	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 20.2W, 83.6° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	52.1	7.2
6	23.1	10.7
8	13.0	14.3
10	8.3	17.9

LUMINANCE (Average cd/m²)

Degrees	Average 0° Luminance
45	45713
55	29080
65	18947
75	5354
85	0

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.



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