



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

5" TC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

TC1420LED4 RECESSED HOUSING
HYPERBOLIC 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 unique aperture appearance with reduced 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.

Hyperbolic Optical System Unique hyperbolic reflector shape optimized for small, directional LED source provides unique aperture appearance with reduced brightness • NMC™ nano mixing chamber (provided with trim) with high reflectance white finish coupled with a high transmission diffusing lens conceals the LED and integrates with the hyperbolic trim to create a low glare, efficient system.

Aesthetic Trim Selections Patent pending hyperbolic reflector available in clear Alzak®, haze, wheat haze, black Alzak® and white • Shadow free, knife edge design blends seamlessly into ceiling • Installs with torsion springs.

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 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

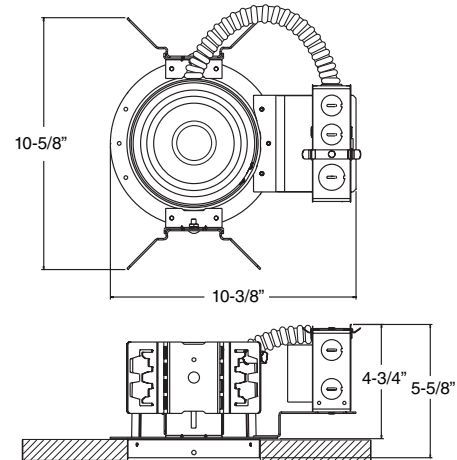
Housing Designed for use in TC applications (non-insulated) • Aluminum housing • Housing is vertically adjustable to accommodate up to a 2" ceiling thickness.

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)

5" TC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

TC1420LED4 RECESSED HOUSING HYPERBOLIC TRIMS

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 CP 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	TR5-ABZ²	Trim Ring - Classic Age Bronze
HB-26	Two 26" C-channel bar hangers	TR5-BL²	Trim Ring - Black
HB-50	Two 50" C-channel bar hangers	TR5-SC²	Trim Ring - Satin Chrome
LB-27	Two 27" linear bar hangers	TR5-WH²	Trim Ring - White

Example: **204HYP3-HZ-WH**

Trim/Description
 204HYP3-C-WH Clear Alzak® 204HYP3-B-WH¹ Black Alzak® 204HYP3-W-WH White 204HYP3-HZ-WH Haze 204HYP3-WHZ-WH¹ Wheat Haze 204HYP3-WHZ-ABZ¹ Wheat Haze

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

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

Alzak is a registered trademark of Alcoa Corp.

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

Notes: ¹ Not ENERGY STAR® Qualified.

² Trim ring compatible with 204 and 205 trims.

PHOTOMETRIC REPORT

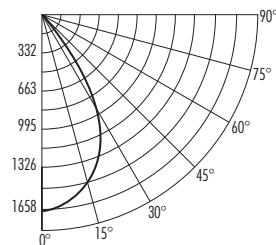
Test Report#: PT10141706R

Catalog No: TC1420LED4-35K-U

with 204HYP3-C-WH Trim and standard
nano mixing chamber

Luminaire Spacing Criteria: 0.90

Luminaire LPW: 74



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1658
5	1624
15	1496
25	1074
35	522
45	127
55	0
65	0
75	0
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	90	78
5.0'	66	57	50
6.0'	46	40	35
7.0'	37	32	28
8.0'	29	25	22
9.0'	23	19	17
10.0'	17	14	13

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	1060	N/A	71.1
0-40°	1388	N/A	93.0
0-60°	1492	N/A	100.0
0-90°	1492	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 20.2W, 59.9° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	103.6	4.6
6	46.1	6.9
8	25.9	9.2
10	16.6	11.5

LUMINANCE (Average cd/m²)

Degrees	Average 0° Luminance
45	16972
55	0
65	0
75	0
85	0

PHOTOMETRIC REPORT

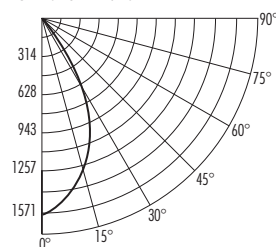
Test Report#: PT10141704R

Catalog No: TC1420LED4-35K-U

with 204HYP3-HZ-WH Trim and standard
nano mixing chamber

Luminaire Spacing Criteria: 0.92

Luminaire LPW: 70



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1571
5	1532
15	1298
25	1008
35	534
45	124
55	2
65	0
75	0
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'	98	85	74
5.0'	63	54	47
6.0'	43	38	33
7.0'	35	30	27
8.0'	28	24	21
9.0'	21	18	16
10.0'	16	14	12

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	967	N/A	68.6
0-40°	1299	N/A	92.2
0-60°	1409	N/A	100.0
0-90°	1409	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 20.2W, 61.3° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	98.2	4.7
6	43.6	7.1
8	24.5	9.5
10	15.7	11.9

LUMINANCE (Average cd/m²)

Degrees	Average 0° Luminance
45	16666
55	361
65	0
75	0
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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