



# LOW PROFILE 3-1/4" LED RECESSED ADJUSTABLE 800/1200/1500/2000 LUMEN ANGLE CUT BAFFLE TC420LP, IC415LP, IC412LP, IC408LP with 435N Trim

## PRODUCT DESCRIPTION

Low Profile recessed adjustable LED luminaire is less than 4" tall with 3 1/4" angle cut baffle produces up to 1900 delivered lumens. Fixture has 45° visual cutoff and features precision geared hot-aiming. Available in both IC and Non-IC rated configurations.

## PRODUCT SPECIFICATIONS

**LED Light Engine** Consistent fixture to fixture color within 3-step MacAdam ellipse • 2700K, 3000K, 3500K, or 4000K color temperatures are available with 80 CRI minimum • 2700K and 3000K also available with 90 CRI minimum.

**Modular Optics** Available with 12° Spot, 24° Narrow Flood, 35° Flood and 50° wide flood field interchangeable optics • Additional distributions of 20°, 30°, 40°, 45° and 60° FWHM can be achieved with the use of the diffusing films and spot primary optic • Patented (US Patent 8,950,911) auto-adjusting optic holder maximizes luminaire efficiency by maintaining optimal LED optic position • Accommodates up to two (2) additional beam control lenses and/or filters.

**Adjustability** Acu-Aim™ precision geared hot-aiming achieves 370° rotation, 45° tilt • Optimized center beam optics translates light engine forward as it is aimed off nadir, ensuring maximum light and low brightness • Black aiming mechanism preserves dark aperture.

**Baffle** Angle-cut grooved baffle available in white or black provides 50° cut-off.

**Trims Style** Utilizes torsion spring retention for tight, secure fit to ceiling • Trim ring features beveled knife edge for clean ceiling interface.

**LED Driver** Seven (7) driver options available to accommodate 120-277V input and multiple control protocols • For a list of compatible dimmers, refer to [ACLXLED3-DIM](#) • Power Factor > 0.9 • Field replaceable from below or above ceiling.

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

**Warranty** 5 years from date of purchase on LED components • Standard Juno Lighting Group product guarantee terms and conditions apply.

**Codes/Labels** UL and cUL listed for through branch wiring, damp locations • IC housings meet energy code Air Leakage requirements per ASTM E283 • IC housings are rated for direct contact with insulation • IC408LP and IC412LP are compatible with spray foam insulation with an R-Value of 3.7 per inch or less • Union made.

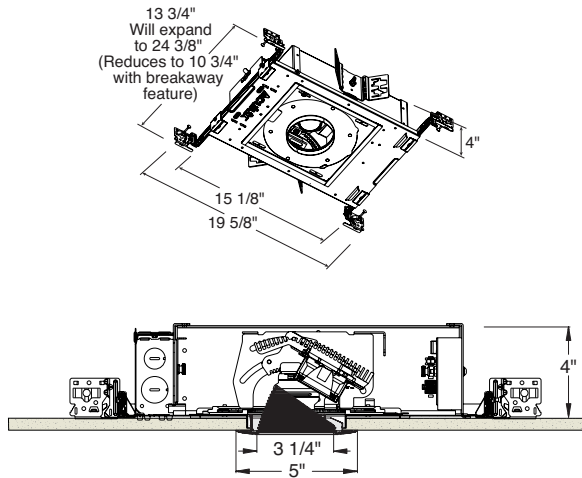
**New Construction Mounting** Shallow new construction fixture is less than 4" tall for applications with limited space • Features patented (US Patent 8,038,113) Pro-VI™ bar hanger system, permitting quick placement of housing with 24" on-center joists or suspended ceilings and vertically adjustable mounting brackets (butterfly brackets) • Centerline indicators on plaster frame and patented (US Patent 8,277,090) Tru-Line™ Platform featuring +/- 1/2" translation aids fixture alignment after installation, prior to drywall.

**Junction Box** Rated for 4 No. 12 AWG 90° C through branch circuit conductors and includes (6) 1/2", (1) 3/4", and (4) Non-metallic sheathed cable knock-outs • Push-in electrical connectors for field connections.

**Ceiling Thickness** 1/2" – 7/8" ceiling standard • For thicker ceilings, order CTA4N-125 (7/8"-1 1/4"), CTA4N-163 (1 1/4"-1 5/8") or CTA4N-200 (1 5/8"-2") • CTA4N not required for wood, stone, or tile flush mount applications.

Type	Cat. No.
_____	_____
Project: _____	
Notes: _____	

## DIMENSIONS



4 1/4" CEILING CUTOUT

ELECTRICAL DATA								
Lumen Package	800		1200		1500		2000	
Voltage	120	277	120	277	120	277	120	277
Input Power	9.6W	9.7W	15.1W	15.3W	19.8W	19.8W	27.0W	26.7
Input Current	0.08	0.04	0.13	0.06	0.17	0.08	0.23	0.10
Frequency	50/60Hz		50/60Hz		50/60Hz		50/60Hz	
Power Factor	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9

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**Ordering Information** Housing, trim and accessories each ordered separately

Example: **IC412LP-830-N-1**

Series	CRI/Color Temperature	Optic	Driver	Options
<b>IC408LP</b>	800 Lumen, IC Rated <b>827</b> 2700K, 80CRI	<b>S</b> 12° Spot	<b>I</b> 120V, Forward & Reverse Phase Dimming, 5%	<b>CP*</b> Chicago Plenum
<b>IC412LP</b>	1200 Lumen, IC Rated <b>830</b> 3000K, 80CRI	<b>N</b> 24° Narrow Flood	<b>EZ1</b> 120-277V, eldoLED ECOdrive 0-10V Dimming, 1%	<b>N1<sup>1</sup></b> nLight® dimming pack, 120V
<b>IC415LP</b>	1500 Lumen, IC Rated <b>835</b> 3500K, 80CRI	<b>F</b> 35° Flood	<b>EZB</b> 120-277V, eldoLED SOLdrive 0-10V Dimming, 0.1%	<b>N2<sup>1</sup></b> nLight® dimming pack, 277V
<b>TC420LP</b>	2000 Lumen, Non-IC Rated <b>840</b> 4000K, 80CRI <b>927</b> 2700K, 90CRI <b>930</b> 3000K, 90CRI	<b>W</b> 50° Wide Flood	<b>L</b> 120-277V, Lutron Hi-Lume 3-Wire Dimming, Ecosystem Compatible, 1% <b>D</b> 120V, Lutron Hi-Lume 2-Wire Dimming, 1% <b>M</b> 120-277V, DMX512/RDM <b>A</b> 120-277V, DALI Dimming	<b>CPNL<sup>1,2</sup></b> nLight® dimming pack and Chicago Plenum rated  *Chicago Plenum not available on TC420LP  <sup>1</sup> Available with eldoLED drivers only  <sup>2</sup> nLight® NPS80EZ ships loose for remote mounting

Example: **435NW-WH**

**Trim**



Trim Ring	Description
<b>435NB-WH</b>	Black Baffle, Black Baffle
<b>435NB-ABZ</b>	Black Baffle
<b>435NB-SC</b>	Black Baffle
<b>435NW-WH</b>	White Baffle

Trim Ring Finish: ABZ - Classic Aged Bronze, SC - Satin Chrome, WH - White.  
Product specifications subject to change without notice.

# LOW PROFILE 3-1/4" LED RECESSED ADJUSTABLE 800/1200/1500/2000 LUMEN ANGLE CUT BAFFLE TC420LP, IC415LP, IC412LP, IC408LP with 435N Trim

To achieve the desired beam angle (FWHM), specify the following primary LED optic on the luminaire and order the diffusing film from the table below

Desired FWHM	Primary Optic	Film
12°	S	-
20°	S	AF3-10
24°	N	-
30°	S	AF3-20
35°	F	-
40°	S	AF3-30
45°	S	AF3-40
50°	W	-
60°	S	AF3-50
20°x60°	S	AF3-60x1

### Optical Accessories

Cat. #	Description	Cat. #	Description
<b>TIR-ACLX3-SP</b>	12° Spot Optic	<b>T746</b>	Med. Green Color Filter
<b>TIR-ACLX3-NFL</b>	24° Narrow Flood Optic	<b>T7401</b>	Red Dichroic Lens
<b>TIR-ACLX3-FL</b>	35° Flood Optic	<b>T7403</b>	Med. Green Dichroic Lens
<b>TIR-ACLX3-WFL</b>	50° Wide Flood Optic	<b>T7404</b>	Med. Blue Dichroic Lens
<b>AF3-10</b>	10° Film (Use with Spot Optic)	<b>T7405</b>	Yellow Dichroic Lens
<b>AF3-20</b>	20° Film (Use with Spot Optic)	<b>T7406</b>	Magenta Dichroic Lens
<b>AF3-30</b>	30° Film (Use with Spot Optic)	<b>T7411</b>	Blue Green Dichroic Lens
<b>AF3-40</b>	40° Film (Use with Spot Optic)	<b>T7416</b>	Daylight Blue Correction Lens
<b>AF3-50</b>	50° Film (Use with Spot Optic)	<b>T7420</b>	Diffuse Spread Lens
<b>AF3-60x1</b>	60°x1° Film (Use with Spot Optic)	<b>T7421</b>	Uniformity Lens
<b>T741</b>	Med. Pink Color Filter	<b>T7422</b>	UV Filter Lens
<b>T742</b>	Warm Red Color Filter	<b>T7477</b>	Prismatic Lens
<b>T743</b>	Daylight Blue Color Filter	<b>T7478</b>	Linear Spread Lens
<b>T744</b>	Med. Blue Color Filter	<b>T7459BL</b>	Hexcell Louver
<b>T745</b>	Med. Amber Color Filter		

Product specifications subject to change without notice.

### Misc. Accessories

Cat. #	Description
<b>CTA4N-125</b>	1 1/4" Thick Ceiling Adapter
<b>CTA4N-163</b>	1 5/8" Thick Ceiling Adapter
<b>CTA4N-200</b>	2" Thick Ceiling Adapter
<b>HB-1</b>	(2) Real Nail 3 Bar Hangers
<b>HB-26</b>	(2) 26" C-Channel Bar Hangers
<b>HB-50</b>	(2) 50" C-Channel Bar Hangers
<b>LB-27</b>	(2) 27" Linear Bar Hangers
<b>EMI-20</b>	20W Emergency Lighting Inverter

To order, specify catalog number.



# 3-1/4" LED RECESSED ADJUSTABLE 800/1200/1500/2000 LUMEN

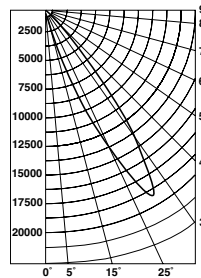
ANGLE CUT BAFFLE  
NEW CONSTRUCTION

IC/TC420L, IC415L, IC412L, IC408L  
with 435N Trim

### SPOT PHOTOMETRIC REPORT

Test Report: PTO4152502  
Catalog No: IC/TC420L-830-S-1  
(Aim at 30°)  
with 435NW trim

Watts: 26.2  
Lumens: 1794  
Luminaire LPW: 68



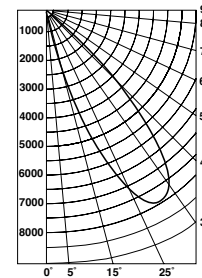
### Candlepower Distribution (Candelas)

Degrees	Vertical	Candela
0°	127	
5°	288	
10°	590	
15°	1940	
20°	5849	
25°	13766	
30°	18953	
35°	14013	
40°	6003	
45°	1826	
50°	313	
55°	60	
60°	11	
65°	4	
70°	2	
75°	2	
80°	2	
85°	1	
90°	0	

### NARROW FLOOD PHOTOMETRIC REPORT

Test Report: PTO4152702  
Catalog No: IC/TC420L-830-N-1  
(Aim at 30°)  
with 435NW trim

Watts: 26.2  
Lumens: 1835  
Luminaire LPW: 70



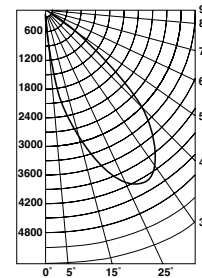
### Candlepower Distribution (Candelas)

Degrees	Vertical	Candela
0°	262	
5°	490	
10°	891	
15°	2271	
20°	4938	
25°	7078	
30°	7997	
35°	7615	
40°	6086	
45°	3628	
50°	903	
55°	136	
60°	54	
65°	5	
70°	3	
75°	3	
80°	2	
85°	1	
90°	0	

### FLOOD PHOTOMETRIC REPORT

Test Report: PTO4152802  
Catalog No: IC/TC420L-830-F-1  
(Aim at 30°)  
with 435NW trim

Watts: 26.2  
Lumens: 1895  
Luminaire LPW: 72



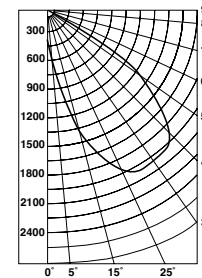
### Candlepower Distribution (Candelas)

Degrees	Vertical	Candela
0°	447	
5°	1079	
10°	1916	
15°	2904	
20°	3697	
25°	4135	
30°	4314	
35°	4157	
40°	3735	
45°	3032	
50°	1798	
55°	992	
60°	478	
65°	5	
70°	3	
75°	2	
80°	2	
85°	1	
90°	0	

### WIDE FLOOD PHOTOMETRIC REPORT

Test Report: PTO4152902  
Catalog No: IC/TC420L-830-W-1  
(Aim at 30°)  
with 435NW trim

Watts: 26.2  
Lumens: 1577  
Luminaire LPW: 60

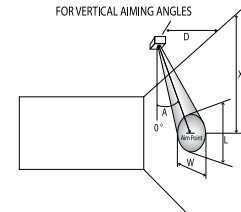
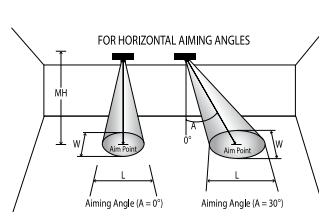


### Candlepower Distribution (Candelas)

Degrees	Vertical	Candela
0°	470	
5°	683	
10°	992	
15°	1383	
20°	1737	
25°	1943	
30°	2001	
35°	1984	
40°	1944	
45°	1883	
50°	1735	
55°	1247	
60°	584	
65°	16	
70°	7	
75°	6	
80°	5	
85°	2	
90°	0	

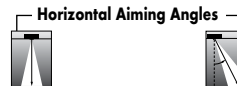
### LUMEN OUTPUT MULTIPLIERS

Color Temperature	CRI	Multiplier	Lumen Package	Multiplier
2700K	80	0.95	800	0.40
3000K	80	1.00	1200	0.61
3500K	80	1.05	1500	0.75
4000K	80	1.10	2000	1.00
2700K	90	0.83		
3000K	90	0.87		



**CBCP** • Centerbeam candlepower  
**FC** • Footcandles at beam center (aim point)

In vertical aiming applications, aim point (X) is determined by dividing distance from the wall (D) by the tangent of the desired aim angle (A) (0.5774 for 30°, 1.0 for 45°).



Beam Type	Beam Spread°	CBCP	0°			30°			30°				45°					
			MH	FC	L	W	FC	L	W	D	FC	X	L	W	FC	X	L	W
<b>SPT</b>	12°	18953	6	526	1.6	1.6	342	2.1	1.8	3	263	5.2	3.4	1.6	745	3.0	1.6	1.1
			8	296	2.1	2.1	192	2.8	2.4	4	148	6.9	4.5	2.1	419	4.0	2.2	1.5
			10	190	2.7	2.7	123	3.6	3.1	5	95	8.7	5.6	2.7	268	5.0	2.7	1.9
			12	132	3.2	3.2	85	4.3	3.7	6	66	10.4	6.7	3.2	186	6.0	3.2	2.2
<b>NFL</b>	24°	7997	4	500	1.9	1.9	325	2.5	2.1	2	250	3.5	4.4	1.9	707	2.0	2.0	1.3
			6	222	2.8	2.8	144	3.8	3.2	3	111	5.2	6.6	2.8	314	3.0	2.9	2.0
			8	125	3.7	3.7	81	5.0	4.3	4	62	6.9	8.8	3.7	177	4.0	3.9	2.6
			10	80	4.6	4.6	52	6.3	5.4	5	40	8.7	11.1	4.6	113	5.0	4.9	3.3
<b>FL</b>	35°	4314	4	270	2.7	2.7	175	3.8	3.2	2	135	3.5	8.4	2.7	381	2.0	3.1	1.9
			6	120	4.1	4.1	78	5.7	4.7	3	60	5.2	12.7	4.1	169	3.0	4.7	2.9
			8	67	5.5	5.5	44	7.6	6.3	4	34	6.9	16.9	5.5	95	4.0	6.2	3.9
			10	43	6.8	6.8	28	9.5	7.9	5	22	8.7	21.1	6.8	61	5.0	7.8	4.8
<b>WFL</b>	50°	2001	4	30	8.2	8.2	19	11.4	9.5	6	15	10.4	25.3	8.2	42	6.0	9.3	5.8
			6	56	5.2	5.2	36	7.4	6.0	3	28	5.2	24.1	5.2	79	3.0	6.4	3.7
			8	31	7.0	7.0	20	9.9	8.0	4	16	6.9	32.1	7.0	44	4.0	8.6	4.9
			10	20	8.7	8.7	13	12.4	10.0	5	10	8.7	40.2	8.7	28	5.0	10.7	6.1
			12	14	10.4	10.4	9	14.8	12.0	6	7	10.4	48.2	10.4	20	6.0	12.9	7.4

