



RECESSED DOWNLIGHT

3-1/4" BAFFLED APERTURE

Non-IC Rated, 50W PAR20 or 75W PAR16

TC13N, 434N TRIM

PRODUCT DESCRIPTION

Recessed PAR20/PAR16 downlight luminaire with 3 1/4" grooved deep baffle aperture. Fixture has 50° visual cutoff to lamp and lamp image. Sealed Air-Loc housing ensures maximum energy savings and controls plenum sound transmission. Low profile non-IC housing is for use in non-insulated areas, or where insulation is spaced at least 3" from housing.

PRODUCT SPECIFICATIONS

Baffle Grooved deep baffle available in white or black • Provides 50° lamp and lamp image cut-off.

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

Socket Medium base porcelain socket with nickel plated copper screw shell.

Lamp One 50W PAR20 or 75W PAR16 lamp.

Codes/Labels UL and cUL listed for through branch wiring, damp locations • Meets energy code Air Leakage requirements per ASTM E283 • Product thermally protected • Union made.

Patented (US Patent 8,038,113) Pro-VI™ Bar Hanger System With locking set screws, permits quick placement of housing within 24" O.C. joists or suspended ceilings • Robust bar eliminates flexing regardless of fixture position • Integral T-bar notch with locking tabs secures housing to suspended ceiling grid • Captive bugle-headed ring shank nail for quick one-step installation • Bar Hanger foot aligns to bottom of construction joist and breaks away for use in suspended ceilings.

Junction Box Rated for 8 No. 12 AWG 90° C through branch circuit conductors and includes (5) 1/2", (1) 3/4", and (4) Non-metallic sheathed cable knock-outs • Push-in electrical connectors for field connections.

Housing/Mounting Frame Black steel plaster frame and housing painted for visually dark interior • V-Notch in plaster frame aids fixture alignment during installation • Patent pending Tru-Line™ Adjustment Mechanism featuring +/- 1/2" translation aids fixture alignment after installation, prior to drywall.

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").

Project: _____

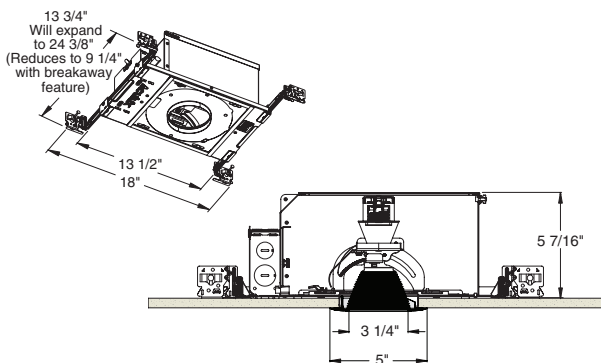
Fixture Type: _____

Location: _____

Contact/Phone: _____



DIMENSIONS



4 1/4" CEILING CUTOUT

Ordering Information

Housing, trim and accessories each ordered separately

Example: TC13N	Example: 434NB-WH
Housing	Trim/Description
TC13N	
Options	
CP Chicago Plenum	

Accessories

Cat. #	Description
CTA4N-125	1 1/4" Thick Ceiling Adapter
CTA4N-163	1 5/8" Thick Ceiling Adapter
CTA4N-200	2" Thick Ceiling Adapter

To order, specify catalog number.



Trim Ring	Description
434NB-WH	Black Baffle
434NB-ABZ	Black Baffle
434NB-SC	Black Baffle
434NW-WH	White Baffle, White Ring

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

Product specifications subject to change without notice.

PHOTOMETRIC REPORT

Catalog Number: TC13N (434NW-WH)

Test Number: PTO1100401

Total Luminaire Efficiency: 68.6%

Luminaire Spacing Criteria: 0.51

Luminaire: White baffle trim. Open aperture.

Lamps: One 75PAR16/HAL/NFL30, rated at 900 total lumens.

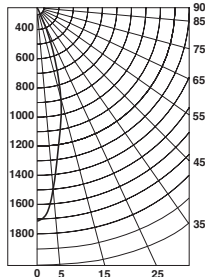
Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	47.3	21.1	3.4'
7'	34.7	15.5	3.9'
8'	26.6	11.9	4.5'
9'	21.0	9.4	5.0'
10'	17.0	7.6	5.6'
11'	14.1	6.3	6.2'
12'	11.8	5.3	6.7'
13'	10.1	4.5	7.3'
14'	8.7	3.9	7.9'
15'	7.6	3.4	8.4'

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 20% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	43	39	35
5' x 5'	28	25	22
6' x 6'	19	17	16
7' x 7'	16	14	13
8' x 8'	12	11	10
9' x 9'	9	8	8
10' x 10'	7	6	6
12' x 12'	5	4	4



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	1702	
5°	1582	151
15°	889	252
25°	348	161
35°	43	27
45°	11	8
55°	9	8
65°	6	6
75°	4	4
85°	0	0

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	729	2496
55	712	2441
65	656	2246
75	731	2503
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	564	62.7	91.4
0-40°	591	65.7	95.7
0-60°	607	67.5	98.4
0-90°	617	68.6	100.0
90-180°	0	0.0	0.0
0-180°	617	68.6	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	Room Cavity Ratio																	
	80			70			50			30			10			0		
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	82	82	82	82	80	80	80	80	76	76	76	73	73	73	70	70	70	69
1	78	77	75	74	77	75	74	73	73	72	71	70	69	68	68	67	66	65
2	75	72	70	68	74	71	69	67	69	67	66	67	66	65	65	64	63	62
3	72	69	66	64	71	68	65	63	66	64	62	64	63	61	63	62	60	59
4	70	65	62	60	69	65	62	60	63	61	59	62	60	58	61	59	58	57
5	67	62	59	57	66	62	59	57	61	58	56	60	57	56	59	57	55	54
6	65	60	56	54	64	59	56	54	58	56	54	57	55	53	57	55	53	52
7	63	57	54	52	62	57	54	52	56	53	51	55	53	51	55	53	51	50
8	60	55	52	50	60	55	52	50	54	51	49	53	51	49	53	51	49	48
9	58	53	50	48	58	53	50	48	52	49	47	52	49	47	51	49	47	46
10	57	51	48	46	56	51	48	46	50	48	46	50	47	46	50	47	46	45

PHOTOMETRIC REPORT

Catalog Number: TC13N (434NB-WH)

Test Number: PTO1100404

Total Luminaire Efficiency: 65.9%

Luminaire Spacing Criteria: 0.5

Luminaire: Black baffle trim. Open aperture.

Lamps: One 75PAR16/HAL/NFL30, rated at 900 total lumens.

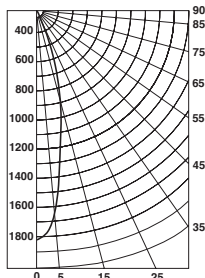
Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	50.7	22.8	3.2'
7'	37.2	16.8	3.7'
8'	28.5	12.9	4.3'
9'	22.5	10.2	4.8'
10'	18.2	8.2	5.3'
11'	15.1	6.8	5.9'
12'	12.7	5.7	6.4'
13'	10.8	4.9	6.9'
14'	9.3	4.2	7.5'
15'	8.1	3.7	8.0'

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 20% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	42	38	35
5' x 5'	27	24	22
6' x 6'	19	17	16
7' x 7'	15	14	13
8' x 8'	12	11	10
9' x 9'	9	8	8
10' x 10'	7	6	6
12' x 12'	5	4	4



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	1824	
5°	1703	163
15°	909	258
25°	342	158
35°	23	14
45°	0	0
55°	0	0
65°	0	0
75°	0	0
85°	0	0

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	0	0
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	579	64.3	97.6
0-40°	593	65.9	100.0
0-60°	593	65.9	100.0
0-90°	593	65.9	100.0
90-180°	0	0.0	0.0
0-180°	593	65.9	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	Room Cavity Ratio																	
	80			70			50			30			10			0		
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	78	78	78	78	77	77	77	77	73	73	73	70	70	70	67	67	67	66
1	76	74	73	72	74	73	72	71	70	69	68	68	67	66	66	65	65	63
2	73	71	68	67	72	69	68	66	67	66	65	65	64	63	64	63	62	61
3	71	67	65	63	69	66	64	62	65	63	61	63	62	60	62	61	60	59
4	68	64	62	60	67	64	61	59	62	60	59	61	59	58	60	59	57	57
5	66	62	59	57	65	61	59	57	60	58	56	59	57	56	58	57	55	54
6	64	59	57	54	63	59	56	54	58	56	54	57	55	54	56	55	53	53
7	62	57	54	52	61	57	54	52	56	54	52	55	53	52	55	53	51	51
8	60	55	52	50	59	55	52	50	54	52	50	54	51	50	53	51	50	49
9	58	53	50	49	57	53	50	48	53	50	48	52	50	48	52	50	48	47
10	56	52	49	47	56	51	49	47	51	48	47	50	48	47	50	48	47	46

