



RECESSED DOWNLIGHT

3-1/4" OPEN APERTURE

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

TC13N, 437N TRIM

PRODUCT DESCRIPTION

Recessed PAR20/PAR16 downlight luminaire with 3 1/4" Alzak deep cone 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

Reflector .040" aluminum parabolic reflector in clear, gold, black, haze, or wheat haze Alzak finish provides 50° lamp and lamp image cut-off.

Trims Style Trim Ring, Self Flanged and Flush Mount reflectors utilize torsion spring retention for tight, secure fit to ceiling • Trim ring features beveled knife edge for clean ceiling interface • Self Flanged reflectors with polished or optional white painted flange • For flush mount installations in drywall ceilings use the FMA4 flush mount adapter • For flush mount installations in wood, stone, or tile ceilings the FMA4-SC*** must be used (specify ceiling thickness and adapter finish).

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") • CTA4N not required for wood, stone, or tile flush mount applications.

Project: _____

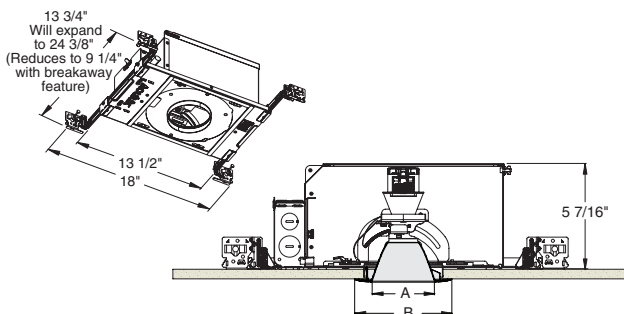
Fixture Type: _____

Location: _____

Contact/Phone: _____



DIMENSIONS



4 1/4" CEILING CUTOUT
(REFER TO INSTRUCTION SHEET FOR FLUSH MOUNT CEILING CUTOUT)

	A	B
Trim Ring	3 1/4"	5"
Self Flanged	3 3/8"	4 5/8"
Flush Mount	3 3/8"	3 7/8"

Ordering Information

Housing, trim and accessories each ordered separately

Example: **TC13N**

Housing	Options
TC13N	CP Chicago Plenum

Flush Mount Adapters

FMA4	Drywall Ceiling Adapter
FMA4-SC087-WH	Wood, Stone, Tile, 1/2"-7/8" Thick Ceiling, Adapter, White
FMA4-SC087-BL	Wood, Stone, Tile, 1/2"-7/8" Thick Ceiling, Adapter, Black
FMA4-SC125-WH	Wood, Stone, Tile, 7/8"-1 1/4" Thick Ceiling, Adapter, White
FMA4-SC125-BL	Wood, Stone, Tile, 7/8"-1 1/4" Thick Ceiling, Adapter, Black
FMA4-SC163-WH	Wood, Stone, Tile, 1 1/4"-1 5/8" Thick Ceiling, Adapter, White
FMA4-SC163-BL	Wood, Stone, Tile, 1 1/4"-1 5/8" Thick Ceiling, Adapter, Black

Misc. Accessories

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.

Example: **437NC-WH**

Trim/Description			
Trim Ring ¹	Self Flanged ²	Flush Mount ³	Description
437NB-WH	437NB-SF	437NB-FM	Black Cone
437NC-WH	437NC-SF	437NC-FM	Clear Cone
437NG-WH	437NG-SF	437NG-FM	Gold Cone
437NHZ-SC	-	-	Haze Cone
437NHZ-WH	437NHZ-SF	437NHZ-FM	Haze Cone, White Ring
437NWHZ-ABZ	-	-	Wheat Haze Cone
437NWHZ-WH	437NWHZ-SF	437NWHZ-FM	Wheat Haze Cone, White Ring

¹Trim Ring Finish: ABZ - Classic Aged Bronze, SC - Satin Chrome, WH - White.

²For self flanged reflector with optional white painted flange, replace "-SF" suffix with "-SFWH".

³Flush Mount trims must be used with Flush Mount Adapter, ordered separately.

Product specifications subject to change without notice.



PHOTOMETRIC REPORT

Catalog Number: TC13N (437/NC-WH)

Test Number: PT01100405

Total Luminaire Efficiency: 67.5%

Luminaire Spacing Criteria: 0.46

Luminaire: Clear specular Alzak® downlight trim. Open aperture.

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

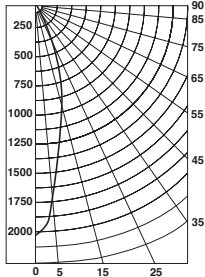
Initial Footcandles

Distance to Illuminated Plane (feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	56.2	25.8	2.9'
7'	41.3	19.0	3.4'
8'	31.6	14.5	3.9'
9'	25.0	11.5	4.3'
10'	20.2	9.3	4.8'
11'	16.7	7.7	5.3'
12'	14.1	6.5	5.8'
13'	12.0	5.5	6.3'
14'	10.3	4.7	6.8'
15'	9.0	4.1	7.2'

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'	27	25	23
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°	2024	
5°	1744	166
15°	930	264
25°	352	163
35°	23	15
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°	593	65.9	97.6
0-40°	608	67.5	100.0
0-60°	608	67.5	100.0
0-90°	608	67.5	100.0
90-180°	0	0.0	0.0
0-180°	608	67.5	100.0

COEFFICIENTS OF UTILIZATION – % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30
0	80	80	80	79	79	79	75	75	75	72	72	72	69	69	69	68	68	68
1	78	76	75	74	76	75	73	72	72	71	70	69	69	68	67	67	66	65
2	75	72	70	68	73	71	69	68	69	68	66	67	66	65	65	64	63	62
3	72	69	66	64	71	68	66	64	66	64	63	65	63	62	63	62	61	60
4	70	66	63	61	69	65	63	61	64	62	60	63	61	59	62	60	59	58
5	68	63	60	58	67	63	60	58	62	59	58	61	59	57	60	58	57	56
6	65	61	58	56	65	60	58	56	60	57	55	59	57	55	58	56	55	54
7	63	59	56	54	63	58	55	53	58	55	53	57	55	53	56	54	53	52
8	61	57	54	52	61	56	53	51	56	53	51	55	53	51	54	52	51	50
9	59	55	52	50	59	54	52	50	54	51	50	53	51	49	53	51	49	49
10	58	53	50	48	57	53	50	48	52	50	48	52	49	48	51	49	48	47

