



**PRODUCT DESCRIPTION**

Recessed PAR20/PAR16 downlight luminaire with 1 3/4" regressed pinhole 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 black Alzak finish shields housing interior.

**Trims Style** Die Cast Trim Ring and Flush Mount trims utilize torsion spring retention for tight, secure fit to ceiling • Flush Mount trim creates a truly trimless aperture • 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.

**RECESSED DOWNLIGHT**  
 1-3/4" REGRESSED PINHOLE  
 Non-IC Rated, 50W PAR20 or  
 75W PAR16  
**TC13N, 4307N TRIM**

Project: \_\_\_\_\_

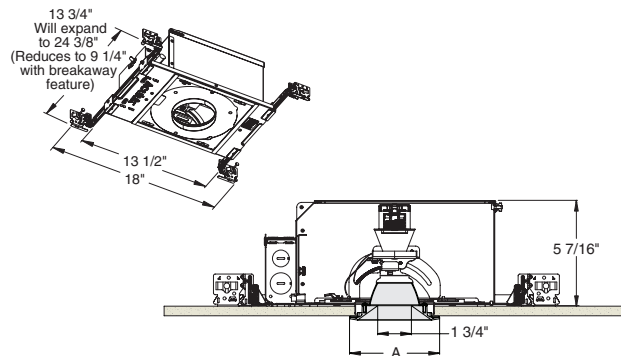
Fixture Type: \_\_\_\_\_

Location: \_\_\_\_\_

Contact/Phone: \_\_\_\_\_



**DIMENSIONS**



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

	A
Trim Ring	4 5/8"
Flush Mount	3 7/8"

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

Example: **TC13N**

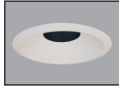

Housing	Options
TC13N	CP Chicago Plenum

Example: **4307N-WH**

Trim/Description

**Flush Mount Adapters**

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

		
<b>Trim Ring</b>	<b>Flush Mount<sup>1</sup></b>	<b>Description</b>
<b>4307N-WH</b> <b>4307N-BL</b>	<b>4307N-WH-FM</b> <b>4307N-BL-FM</b>	White Trim Black Trim

<sup>1</sup>Flush Mount trims must be used with Flush Mount Adapter, ordered separately. Product specifications subject to change without notice.

**Misc. Accessories**

<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

To order, specify catalog number.

**PHOTOMETRIC REPORT**

Catalog Number: TC13N (4307N-WH)

Test Number: PTO1100501

Total Luminaire Efficiency: 63.5%

Luminaire Spacing Criteria: 0.22

Luminaire: 1 3/4" Regressed pinhole trim. Open aperture.

Lamps: One 75PAR16/CAP/NSP10, rated at 900 total lumens.

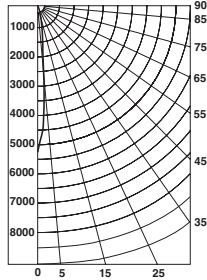
**Initial Footcandles**

Distance to Illuminated Plane (feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	144.5	71.2	1.2'
7'	106.1	52.3	1.3'
8'	81.3	40.1	1.5'
9'	64.2	31.7	1.7'
10'	52.0	25.6	1.9'
11'	43.0	21.2	2.1'
12'	36.1	17.8	2.3'
13'	30.8	15.2	2.5'
14'	26.5	13.1	2.7'
15'	23.1	11.4	2.9'

**AVERAGE INITIAL FOOTCANDLES**

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	41	38	35
5' x 5'	26	24	22
6' x 6'	18	17	16
7' x 7'	15	14	13
8' x 8'	12	11	10
9' x 9'	9	8	8
10' x 10'	6	6	6
12' x 12'	5	4	4



**Candlepower Distribution (Candelas)**

Angle	Candela	Lumens
0°	5200	
5°	2943	281
15°	660	187
25°	215	100
35°	7	4
45°	0	0
55°	0	0
65°	0	0
75°	0	0
85°	0	0

**Luminance Data**

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

**Zonal Lumen Summary**

Zone	Lumens	%Lamp	%Fixture
0-30°	567	63.1	99.3
0-40°	572	63.5	100.0
0-60°	572	63.5	100.0
0-90°	572	63.5	100.0
90-180°	0	0.0	0.0
0-180°	572	63.5	100.0

**COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)**

Effective Floor Reflectance 20%

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

