



RECESSED DOWNLIGHT

3-1/4" BAFFLED APERTURE

Non-IC Rated, 75W MR16

TC943N, 434N TRIM

PRODUCT DESCRIPTION

Recessed MR16 downlight luminaire with 3 1/4" grooved deep baffle aperture. Fixture has 50° visual cutoff to lamp and lamp image. Low profile non-IC housing is for use in non-insulated areas, or where insulation is spaced at least 3" from housing. Supplied with vertically adjustable mounting brackets that accept 1/2" conduit, "C" channel bar hangers, linear bar hangers or telescoping Real Nail bar hangers.

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.

Lens Lampholder accommodates up to three (3) 2" captive accessory lenses • Supplied with stippled clear uniformity lens.

Socket Ceramic bi-pin socket with double blade nickel alloy contacts • Quick disconnect for simplified maintenance.

Lamp One 75W MR16 lamp.

Transformer High efficiency (>90%) dual tap magnetic, toroidal transformer has a boost tap to compensate for dimmer losses, improving color temperature and lumen output • Potted to eliminate noise and vibration • High efficiency (>94%), high power factor electronic transformer also available • 120V or 277V available.

Dimming May be dimmed using dimmers specifically designed for low voltage magnetic or electronic transformers; consult factory or dimmer manufacturer for additional information.

Codes/Labels UL and cUL listed for through branch wiring, damp locations • Product thermally protected • Union made.

Mounting Bracket Rough-in section equipped with vertically adjustable mounting brackets that accept 1/2" conduit, "C" channels (HB-26 or HB-50), linear flat bars (LB-27) or 26" telescoping Real Nail bar hangers (HB-1).

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.

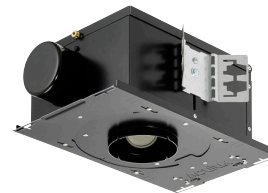
Ceiling Thickness 1/2" - 7/8" ceiling standard • For thicker ceilings, order CTA4N-125 (7/8"-1 1/4"), CTA4N-163 (1 1/4" - 1 5/8") or CTA4N-200 (1 5/8" - 2").

Project: _____

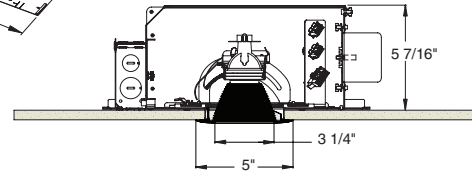
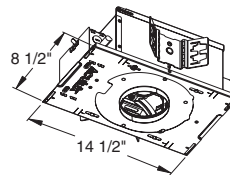
Fixture Type: _____

Location: _____

Contact/Phone: _____



DIMENSIONS



4 1/4" CEILING CUTOUT

Ordering Information

Housing, trim and accessories each ordered separately

Example: **TC943N-V**

Housing	Transformer	Options
TC943N	Blank V E1 E2	CP Chicago Plenum
	120V Magnetic	
	277V Magnetic	
	120V Electronic	
	277V Electronic	

Example: **434NB-WH**

Trim/Description



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.

Accessories

Cat. #	Description	Cat. #	Description
T741	Med. Pink Color Filter	T7420	Diffuse Spread Lens
T742	Warm Red Color Filter	T7422	UV Filter Lens
T743	Daylight Blue Color Filter	T7477	Prismatic Lens
T744	Med. Blue Color Filter	T7478	Linear Spread Lens
T745	Med. Amber Color Filter	T7459BL	Hexcell Louver
T746	Med. Green Color Filter	CTA4N-125	1 1/4" Thick Ceiling Adapter
T7401	Red Dichroic Lens	CTA4N-163	1 5/8" Thick Ceiling Adapter
T7403	Med. Green Dichroic Lens	CTA4N-200	2" Thick Ceiling Adapter
T7404	Med. Blue Dichroic Lens	HB-1	(2) Real Nail 3 Bar Hangers
T7405	Yellow Dichroic Lens	HB-26	(2) 26" C-Channel Bar Hangers
T7406	Magenta Dichroic Lens	HB-50	(2) 50" C-Channel Bar Hangers
T7411	Blue Green Dichroic Lens	LB-27	(2) 27" Linear Bar Hangers
T7416	Daylight Blue Correction Lens		

To order, specify catalog number.



PHOTOMETRIC REPORT

Catalog Number: TC943N (434NW-WH)
Test Number: PT12091501
Total Luminaire Efficiency: 66.9%
Luminaire Spacing Criteria: 0.53
Luminaire: White Baffle Trim. Open Aperture.
Lamps: One 50MR16/1R/FL35/C, rated at 1200 total lumens.

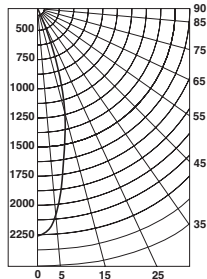
Initial Footcandles

Distance to Illuminated Plane (feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	62.7	27.6	3.6'
7'	46.1	20.3	4.2'
8'	35.3	15.5	4.8'
9'	27.9	12.3	5.4'
10'	22.6	9.9	6.0'
11'	18.7	8.2	6.5'
12'	15.7	6.9	7.1'
13'	13.4	5.9	7.7'
14'	11.5	5.1	8.3'
15'	10.0	4.4	8.9'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	56	50	46
5' x 5'	36	32	29
6' x 6'	25	22	20
7' x 7'	20	18	16
8' x 8'	16	14	13
9' x 9'	12	11	10
10' x 10'	9	8	7
12' x 12'	6	6	5



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	2257	
5°	2116	202
15°	1242	352
25°	398	184
35°	55	34
45°	14	11
55°	10	9
65°	6	6
75°	4	4
85°	0	0

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	940	3221
55	781	2675
65	697	2386
75	744	2548
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	738	61.5	92.0
0-40°	772	64.4	96.3
0-60°	792	66.0	98.7
0-90°	802	66.9	100.0
90-180°	0	0.0	0.0
0-180°	802	66.9	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	0			
0	80	80	80	80	78	78	78	78	74	74	74	71	71	71	68	68	68	67
1	77	75	74	72	75	74	72	71	71	70	69	68	68	67	66	66	65	64
2	74	71	69	67	72	70	68	66	68	66	65	66	64	63	64	63	62	61
3	71	67	65	62	70	66	64	62	65	63	61	63	61	60	62	60	59	58
4	68	64	61	59	67	63	61	59	62	60	58	61	59	57	60	58	57	56
5	66	61	58	56	65	61	58	56	60	57	55	59	57	55	58	56	54	54
6	64	59	56	53	63	58	55	53	57	55	53	57	54	53	56	54	52	51
7	61	57	53	51	61	56	53	51	55	53	51	55	52	51	54	52	50	50
8	59	54	51	49	59	54	51	49	53	51	49	53	50	49	52	50	49	48
9	58	52	49	47	57	52	49	47	52	49	47	51	49	47	51	48	47	46
10	56	51	48	46	55	50	48	46	50	47	45	50	47	45	49	47	45	45

PHOTOMETRIC REPORT

Catalog Number: TC943N (434NB-WH)
Test Number: PT12091507
Total Luminaire Efficiency: 64.1%
Luminaire Spacing Criteria: 0.62
Luminaire: Black Baffle Trim. Open Aperture.
Lamps: One Q71MR16C/FL40, rated at 1200 total lumens.

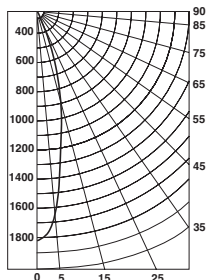
Initial Footcandles

Distance to Illuminated Plane (feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	50.0	20.7	4.4'
7'	36.8	15.2	5.1'
8'	28.1	11.7	5.8'
9'	22.2	9.2	6.6'
10'	18.0	7.5	7.3'
11'	14.9	6.2	8.0'
12'	12.5	5.2	8.7'
13'	10.7	4.4	9.5'
14'	9.2	3.8	10.2'
15'	8.0	3.3	10.9'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	54	49	44
5' x 5'	35	31	28
6' x 6'	24	22	20
7' x 7'	19	18	16
8' x 8'	15	14	13
9' x 9'	12	11	10
10' x 10'	9	8	7
12' x 12'	6	5	5



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	1801	
5°	1730	165
15°	1189	337
25°	482	223
35°	62	39
45°	6	4
55°	0	0
65°	0	0
75°	0	0
85°	0	0

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	380	1303
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	725	60.4	94.3
0-40°	764	63.7	99.4
0-60°	769	64.1	100.0
0-90°	769	64.1	100.0
90-180°	0	0.0	0.0
0-180°	769	64.1	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	0			
0	76	76	76	76	74	74	74	74	71	71	71	68	68	68	65	65	65	64
1	73	72	71	69	72	71	69	68	68	67	66	66	65	64	63	63	62	61
2	71	68	66	64	69	67	65	64	65	63	62	63	62	61	61	60	60	59
3	68	65	62	60	67	64	62	60	62	60	59	61	59	58	59	58	57	56
4	66	62	59	57	65	61	58	56	60	58	56	59	57	55	57	56	55	54
5	63	59	56	54	62	58	56	54	57	55	53	56	54	53	55	54	52	51
6	61	56	53	51	60	56	53	51	55	53	51	54	52	50	53	52	50	49
7	59	54	51	49	58	54	51	49	53	50	49	52	50	48	52	50	48	47
8	57	52	49	47	56	52	49	47	51	48	47	50	48	46	50	48	46	46
9	55	50	47	45	54	50	47	45	49	47	45	49	46	45	48	46	44	44
10	53	48	45	43	52	48	45	43	47	45	43	47	45	43	47	44	43	42

