



RECESSED DOWNLIGHT

3-1/4" BAFFLED APERTURE

Non-IC Rated 20W, 39W CMH MR16

TC943M, 434N TRIM

PRODUCT DESCRIPTION

Recessed metal halide MR16 downlight luminaire with 3/4" grooved deep baffle aperture. 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.

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 two (2) 2" captive accessory lenses.

Socket GX10 twist lock socket with quick disconnect for simplified maintenance.

Lamp One 20W or 39W CMH MR16 lamp.

Ballast High Power Factor, electronic solid state ballast with less than 10% THD • Features transient and short circuit protection • Available in 120V or 277V.

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: _____

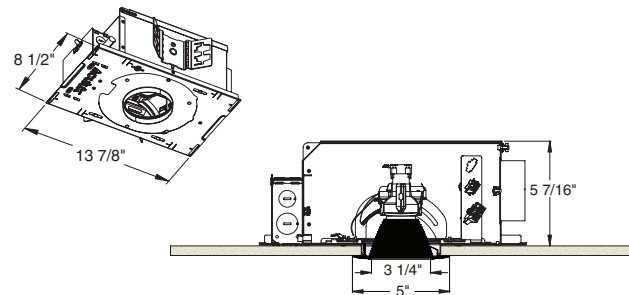
Fixture Type: _____

Location: _____

Contact/Phone: _____



DIMENSIONS



4 1/4" CEILING CUTOUT

Ordering Information

Housing, trim and accessories each ordered separately

Example: **TC943M-MR16-20E1**

Housing	Wattage	Voltage	Options
TC943M-MR16	20 20W 39 39W	E1 120V E2 277V	CP Chicago Plenum

Example: **434N-WH**

Trim/Description

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.



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: TC943M (434NW-WH)
Test Number: PT12090201
Total Luminaire Efficiency: 80.9%
Luminaire Spacing Criteria: 0.43
Luminaire: White Baffle Trim, Open Aperture.
Lamps: One CMH39MR16/930/FL, rated at 2200 total lumens.

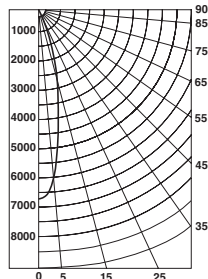
Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	186.6	87.0	2.6'
7'	137.1	63.9	3.1'
8'	105.0	48.9	3.5'
9'	83.0	38.7	3.9'
10'	67.2	31.3	4.4'
11'	55.5	25.9	4.8'
12'	46.7	21.8	5.2'
13'	39.8	18.5	5.7'
14'	34.3	16.0	6.1'
15'	29.9	13.9	6.6'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	125	113	103
5' x 5'	80	72	66
6' x 6'	56	50	46
7' x 7'	45	41	37
8' x 8'	36	32	29
9' x 9'	27	25	22
10' x 10'	20	18	17
12' x 12'	14	13	11



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	6719	
5°	6075	580
15°	2610	740
25°	539	250
35°	161	101
45°	57	44
55°	30	27
65°	20	20
75°	13	14
85°	3	3

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	4417	15134
55	2844	9744
65	2614	8957
75	2733	9363
85	1832	6275

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	1569	71.3	88.2
0-40°	1671	75.9	93.9
0-60°	1742	79.2	97.9
0-90°	1779	80.9	100.0
90-180°	0	0.0	0.0
0-180°	1779	80.9	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80		70		50		30		10		0							
	PW	0	50	30	10	70	50	30	10	50	30	10	0					
0	96	96	96	96	94	94	94	94	90	90	90	86	86	86	83	83	83	81
1	93	91	89	87	91	89	87	86	86	84	83	83	82	81	80	79	79	77
2	89	86	83	81	87	84	82	80	82	80	78	80	78	77	77	76	75	74
3	86	82	78	76	84	81	78	75	78	76	74	77	75	73	75	73	72	71
4	83	78	74	72	81	77	74	71	75	73	71	74	72	70	73	71	69	68
5	80	75	71	68	79	74	70	68	73	70	68	71	69	67	70	68	66	65
6	77	72	68	66	76	71	68	65	70	67	65	69	67	65	68	66	64	63
7	75	69	66	63	74	69	65	63	68	65	63	67	64	62	66	64	62	61
8	73	67	63	61	72	67	63	61	66	63	61	65	62	60	64	62	60	59
9	71	65	61	59	70	65	61	59	64	61	59	63	60	58	63	60	58	57
10	69	63	59	57	68	63	59	57	62	59	57	62	59	57	61	58	57	56

PHOTOMETRIC REPORT

Catalog Number: TC943M (434NB-WH)
Test Number: PT12090302
Total Luminaire Efficiency: 64.0%
Luminaire Spacing Criteria: 0.63
Luminaire: Black Baffle Trim, Open Aperture.
Lamps: One CMH39MR16/930/WFL, rated at 2200 total lumens.

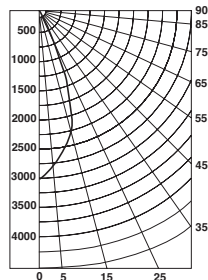
Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	83.8	33.9	4.7'
7'	61.6	24.9	5.5'
8'	47.1	19.1	6.2'
9'	37.3	15.1	7.0'
10'	30.2	12.2	7.8'
11'	24.9	10.1	8.6'
12'	21.0	8.5	9.3'
13'	17.9	7.2	10.1'
14'	15.4	6.2	10.9'
15'	13.4	5.4	11.7'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	99	89	81
5' x 5'	63	57	52
6' x 6'	44	40	36
7' x 7'	36	32	29
8' x 8'	28	25	23
9' x 9'	22	19	18
10' x 10'	16	14	13
12' x 12'	11	10	9



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	3017	
5°	2910	278
15°	2261	641
25°	834	386
35°	148	93
45°	14	11
55°	0	0
65°	0	0
75°	0	0
85°	0	0

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	909	3115
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	1305	59.3	92.6
0-40°	1398	63.5	99.2
0-60°	1409	64.0	100.0
0-90°	1409	64.0	100.0
90-180°	0	0.0	0.0
0-180°	1409	64.0	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80		70		50		30		10		0							
	PW	0	50	30	10	70	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	70	69	72	70	69	68	68	67	66	66	65	64	63	63	62	61
2	71	68	66	64	69	67	65	63	65	63	62	63	62	61	61	60	59	58
3	68	65	62	60	67	64	61	59	62	60	58	61	59	58	59	58	57	56
4	65	61	59	56	64	61	58	56	59	57	55	58	56	55	57	56	54	53
5	63	59	56	53	62	58	55	53	57	55	53	56	54	52	55	53	52	51
6	61	56	53	51	60	56	53	51	55	52	50	54	52	50	53	51	50	49
7	58	54	51	48	58	53	50	48	53	50	48	52	50	48	51	49	48	47
8	56	51	48	46	56	51	48	46	51	48	46	50	48	46	49	47	46	45
9	54	49	46	44	54	49	46	44	49	46	44	48	46	44	48	45	44	43
10	53	48	45	43	52	47	44	43	47	44	42	46	44	42	46	44	42	42

