



RECESSED REMODEL DOWNLIGHT

3-1/4" BAFFLED APERTURE

TC Rated, 50W MR16
TC43NR, 434N TRIM

PRODUCT DESCRIPTION

Recessed MR16 remodel luminaire with 3/4" grooved deep baffle aperture. Fixture has 50° visual cutoff to lamp and lamp image. Low profile TC housing is for use in non-insulated areas, or where insulation is spaced at least 3" from housing. Installs quickly and securely with patented (US Patent 7,191,993) push-pull cable system through ceiling opening.

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 and aluminum heat shield.

Lamp One 50W MR16 lamp.

Transformer 120 V thermally protected magnetic transformer is serviceable from below ceiling • High efficiency (>95%), high power factor electronic transformer also 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.

Patented (US Patent 7,191,993) "Push-Pull" Cable System Allows rapid installation without tools or loose parts • Template included for accurate ceiling cutout • Housing accommodates ceiling thickness from 3/8" to 2" without altering photometrics • Fits 2 x 6 construction.

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

Housing/Mounting Frame Galvanized steel plaster frame. Housing painted black for visually dark interior • Packaged for ease of rapid installation.

Project: _____

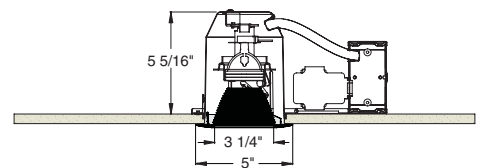
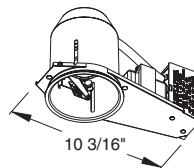
Fixture Type: _____

Location: _____

Contact/Phone: _____



DIMENSIONS



4 7/16" CEILING CUTOUT

Housings

Catalog #	Description
TC43NR	Low Voltage Recessed Magnetic Transformer, 120V
TC43NR-E1	Low Voltage Recessed Electronic Transformer, 120V

Accessories

Cat. #	Description	Cat. #	Description
T741	Med. Pink Color Filter	T7405	Yellow Dichroic Lens
T742	Warm Red Color Filter	T7406	Magenta Dichroic Lens
T743	Daylight Blue Color Filter	T7411	Blue Green Dichroic Lens
T744	Med. Blue Color Filter	T7416	Daylight Blue Correction Lens
T745	Med. Amber Color Filter	T7420	Diffuse Spread Lens
T746	Med. Green Color Filter	T7422	UV Filter Lens
T7401	Red Dichroic Lens	T7477	Prismatic Lens
T7403	Med. Green Dichroic Lens	T7478	Linear Spread Lens
T7404	Med. Blue Dichroic Lens	T7459BL	Hexcell Louver

To order, specify catalog number.

Downlight Baffle



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

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

PHOTOMETRIC REPORT

Catalog Number: TC43NR (434NW-WH)

Test Number: PT12090908

Total Luminaire Efficiency: 69.6%

Luminaire Spacing Criteria: 0.62

Luminaire: White Baffle Trim, Open Aperture.

Lamps: One Q50MR16C/FL40, rated at 800 total lumens.

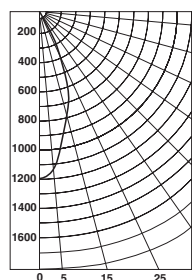
Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	33.3	13.8	4.4'
7'	24.4	10.1	5.1'
8'	18.7	7.7	5.9'
9'	14.8	6.1	6.6'
10'	12.0	5.0	7.3'
11'	9.9	4.1	8.1'
12'	8.3	3.4	8.8'
13'	7.1	2.9	9.5'
14'	6.1	2.5	10.3'
15'	5.3	2.2	11.0'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	39	35	31
5' x 5'	25	22	20
6' x 6'	17	15	14
7' x 7'	14	12	11
8' x 8'	11	10	9
9' x 9'	8	8	7
10' x 10'	6	6	5
12' x 12'	4	4	3



Candlepower Distribution

Angle (Candelas)	Candela	Lumens
0°	1198	
5°	1142	109
15°	774	219
25°	367	170
35°	59	37
45°	11	9
55°	6	6
65°	4	4
75°	3	3
85°	0	0

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	750	2570
55	522	1789
65	477	1635
75	520	1781
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	498	62.3	89.5
0-40°	535	66.9	96.1
0-60°	550	68.7	98.7
0-90°	557	69.6	100.0
90-180°	0	0.0	0.0
0-180°	557	69.6	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	0						
0	83	83	83	83	81	81	81	81	77	77	77	74	74	74	71	71	71	70
1	79	78	76	75	78	76	75	74	73	72	71	71	70	69	69	68	67	66
2	76	73	71	69	75	72	70	68	70	68	66	68	66	65	66	65	64	63
3	73	69	66	64	72	68	66	63	66	64	62	65	63	61	63	62	60	59
4	70	66	62	60	69	65	62	59	63	61	59	62	60	58	61	59	57	57
5	67	62	59	56	66	62	59	56	61	58	56	60	57	55	58	56	55	54
6	65	60	56	53	64	59	56	53	58	55	53	57	55	53	56	54	52	51
7	62	57	53	51	61	56	53	51	56	53	50	55	52	50	54	52	50	49
8	60	54	51	48	59	54	51	48	53	50	48	53	50	48	52	50	48	47
9	58	52	49	46	57	52	49	46	51	48	46	51	48	46	50	48	46	45
10	56	50	47	44	55	50	47	44	49	46	44	49	46	44	48	46	44	43

PHOTOMETRIC REPORT

Catalog Number: TC43NR (434NB-WH)

Test Number: PT12090802

Total Luminaire Efficiency: 62.0%

Luminaire Spacing Criteria: 0.53

Luminaire: Black Baffle Trim, Open Aperture.

Lamps: One 37MR16/1R/FL35/C, rated at 800 total lumens.

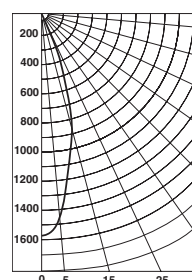
Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	43.1	19.0	3.5'
7'	31.7	14.0	4.1'
8'	24.3	10.7	4.7'
9'	19.2	8.5	5.3'
10'	15.5	6.9	5.9'
11'	12.8	5.7	6.5'
12'	10.8	4.8	7.0'
13'	9.2	4.1	7.6'
14'	7.9	3.5	8.2'
15'	6.9	3.0	8.8'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	35	32	29
5' x 5'	22	20	19
6' x 6'	16	14	13
7' x 7'	13	12	10
8' x 8'	10	9	8
9' x 9'	8	7	6
10' x 10'	6	5	5
12' x 12'	4	4	3



Candlepower Distribution

Angle (Candelas)	Candela	Lumens
0°	1552	
5°	1432	137
15°	852	241
25°	218	101
35°	28	17
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°	479	59.9	96.5
0-40°	496	62.0	100.0
0-60°	496	62.0	100.0
0-90°	496	62.0	100.0
90-180°	0	0.0	0.0
0-180°	496	62.0	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	0						
0	74	74	74	74	72	72	72	72	69	69	69	66	66	66	63	63	63	62
1	71	70	69	68	70	69	68	67	66	65	65	64	63	63	62	61	61	60
2	69	67	65	63	68	65	64	62	64	62	61	62	61	60	60	59	58	58
3	67	64	61	59	65	63	61	59	61	59	58	60	58	57	58	57	56	55
4	64	61	58	56	63	60	58	56	59	57	55	58	56	55	57	55	54	54
5	62	58	56	54	61	58	56	54	57	55	53	56	54	53	55	54	52	52
6	60	56	54	52	60	56	53	52	55	53	51	54	52	51	54	52	51	50
7	58	54	52	50	58	54	51	50	53	51	49	53	51	49	52	50	49	48
8	57	52	50	48	56	52	50	48	52	49	48	51	49	47	50	49	47	47
9	55	51	48	46	55	50	48	46	50	48	46	49	47	46	49	47	46	45
10	53	49	47	45	53	49	46	45	48	46	45	48	46	45	48	46	44	44

