



RECESSED REMODEL DOWNLIGHT

1-1/4" LENSED
PINHOLE APERTURE
TC Rated, 50W MR16
TC43NR, 4332N TRIM

PRODUCT DESCRIPTION

Recessed MR16 downlight luminaire with 1 1/4" lensed pinhole aperture to protect lamp against water. 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

Reflector .040" aluminum parabolic reflector in black Alzak finish shields housing interior.

Trims Style Trim Ring 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, wet 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: _____

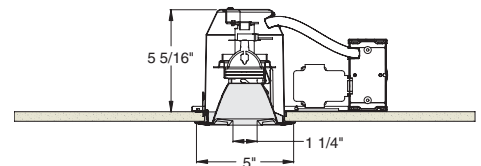
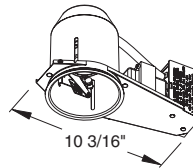
Fixture Type: _____

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.

1 1/4" Lensed Downlight Pinhole



Trim Ring	Description
4332N-ABZ	Aged Bronze Trim Ring
4332N-SC	Satin Chrome Trim ring
4332N-WH	White Trim Ring

PHOTOMETRIC REPORT

Catalog Number: TC43NR (4332N-WH)
Test Number: PT12091002
Total Luminaire Efficiency: 34.1%
Luminaire Spacing Criteria: 0.32
Luminaire: 1 1/4" Pinhole Trim, Clear Glass Lens.
Lamps: One 37MR16/1R/SP10/C, rated at 800 total lumens.

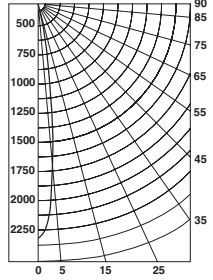
Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	64.4	31.4	1.6'
7'	47.3	23.0	1.9'
8'	36.2	17.6	2.1'
9'	28.6	13.9	2.4'
10'	23.2	11.3	2.7'
11'	19.2	9.3	2.9'
12'	16.1	7.8	3.2'
13'	13.7	6.7	3.5'
14'	11.8	5.8	3.7'
15'	10.3	5.0	4.0'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	20	18	18
5' x 5'	12	12	11
6' x 6'	9	8	8
7' x 7'	7	6	6
8' x 8'	6	5	5
9' x 9'	4	4	4
10' x 10'	3	3	3
12' x 12'	2	2	2



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	2318	
5°	1772	169
15°	340	96
25°	15	7
35°	0	0
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°	273	34.1	100.0
0-40°	273	34.1	100.0
0-60°	273	34.1	100.0
0-90°	273	34.1	100.0
90-180°	0	0.0	0.0
0-180°	273	34.1	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	0					
0	41	41	41	41	40	40	40	40	38	38	38	36	36	36	35	35	35	34
1	40	39	38	38	39	38	38	37	37	36	36	36	35	35	34	34	34	34
2	39	38	37	36	38	37	36	36	36	35	35	35	35	34	34	34	33	33
3	38	36	35	35	37	36	35	34	35	35	34	34	34	33	34	33	33	33
4	37	36	34	34	36	35	34	34	35	34	33	34	33	33	33	33	32	32
5	36	35	34	33	36	34	33	33	34	33	32	33	33	32	33	32	32	32
6	36	34	33	32	35	34	33	32	33	33	32	33	32	32	33	32	32	31
7	35	33	32	32	35	33	32	32	33	32	31	33	32	31	32	32	31	31
8	34	33	32	31	34	33	32	31	32	32	31	32	31	31	32	31	31	30
9	34	32	31	31	34	32	31	31	32	31	30	32	31	30	31	31	30	30
10	33	32	31	30	33	32	31	30	31	31	30	31	31	30	31	30	30	30

PHOTOMETRIC REPORT

Catalog Number: TC43NR (4332N-WH)
Test Number: PT12091006
Total Luminaire Efficiency: 30.0%
Luminaire Spacing Criteria: 0.28
Luminaire: 1 1/4" Pinhole Trim, Clear Glass Lens.
Lamps: One Q50MR16C/NSP15, rated at 800 total lumens.

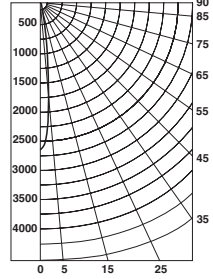
Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	73.6	36.1	1.4'
7'	54.1	26.5	1.6'
8'	41.4	20.3	1.8'
9'	32.7	16.1	2.1'
10'	26.5	13.0	2.3'
11'	21.9	10.7	2.5'
12'	18.4	9.0	2.7'
13'	15.7	7.7	3.0'
14'	13.5	6.6	3.2'
15'	11.8	5.8	3.4'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	17	16	16
5' x 5'	11	10	10
6' x 6'	8	7	7
7' x 7'	6	6	6
8' x 8'	5	5	4
9' x 9'	4	3	3
10' x 10'	3	3	2
12' x 12'	2	2	2



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	2651	
5°	1833	175
15°	205	58
25°	15	7
35°	0	0
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°	240	30.0	100.0
0-40°	240	30.0	100.0
0-60°	240	30.0	100.0
0-90°	240	30.0	100.0
90-180°	0	0.0	0.0
0-180°	240	30.0	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	36	36	36	36	35	35	35	35	33	33	33	32	32	32	31	31	31	30
1	35	34	34	33	34	34	33	33	33	32	32	31	31	31	30	30	30	30
2	34	33	33	32	33	33	32	32	32	31	31	31	31	30	30	30	29	29
3	33	32	32	31	33	32	31	31	31	31	30	31	30	30	30	29	29	29
4	33	32	31	30	32	31	31	30	31	30	30	30	30	29	30	29	29	29
5	32	31	30	29	32	31	30	29	30	30	29	30	29	29	30	29	29	28
6	32	30	30	29	31	30	29	29	30	29	29	30	29	29	29	29	28	28
7	31	30	29	29	31	30	29	28	30	29	28	29	29	28	29	29	28	28
8	31	30	29	28	31	29	29	28	29	29	28	29	28	28	29	28	28	28
9	31	29	28	28	30	29	28	28	29	28	28	29	28	28	29	28	28	27
10	30	29	28	28	30	29	28	28	29	28	27	28	28	27	28	28	27	27

