

PRODUCT SPECIFICATIONS

Cutoff 45° visual cutoff to lamp and lamp image

Trims Style Trim Ring, Self Flanged and Flangeless Trims utilize torsion spring retention for tight, secure fit to ceiling • Trim ring features beveled knife edge for clean ceiling interface • Self Flanged reflectors with polished or optional white painted flange

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 50W MR16 lamp max for IC43N. One 75W MR16 lamp max for TC43N (TC943N).

Adjustability Acu-Aim™ precision geared hot-aiming achieves 370° rotation, 45° tilt • Optimized center lamp beam optics translates lamp forward as it is aimed off nadir, ensuring maximum light and low brightness • Black aiming mechanism with shield prevents visibility into fixture and preserves dark aperture • Shield hinges out of way to facilitate maintenance.

Transformer Available with either magnetic or electronic transformers, capable of 120V or 277V input.

Magnetic Transformer Hatch LT12-75-JLG-1 (120V) or Hatch LT12-75-JLG-1 (277V), high efficiency (>90%) dual tap magnetic, toroidal transformer (has boost tap to compensate for dimmer losses, improving color temperature and lumen output).

Electronic Transformer IC43N available with Hatch RS12-60M, 120V high efficiency, high power factor electronic transformer. TC43N and TC943N available with GE LET 75 (120V) or Hatch RS12-80 (277V) electronic transformers.

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 direct contact with insulation, through-branch wiring, damp locations (wet location with approved trims) • Meets energy code Air Leakage requirements per ASTM E283 • Product thermally protected • Union made.

Bar Hangers / Mounting Brackets IC43N and TC43N features patented (US Patent 8,038,113) Pro-V™ bar hanger system, permitting quick placement of housing with 24" on-center joists or suspended ceilings. TC943N features vertically adjustable mounting brackets (butterfly brackets).

Junction Box IC43N rated for 4 No. 12 AWG 90° through branch conductors • TC43N and TC943N rated for 8 No. 12 AWG 90° C through branch circuit conductors • 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.

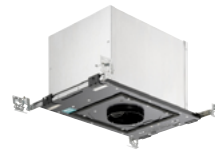
Ceiling Thickness 1/2" – 2" ceiling

Specifications subject to change without notice.

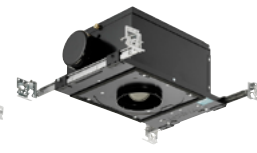
3" MR16 UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH

MR16 Halogen

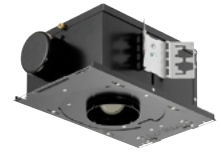
IC43N / TC43N / TC943N



IC43N

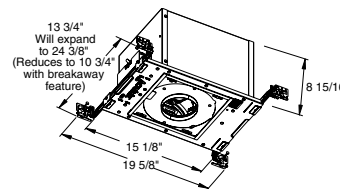


TC43N

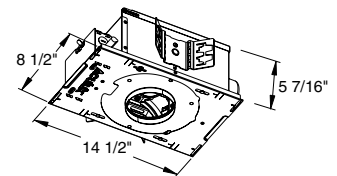


TC943N

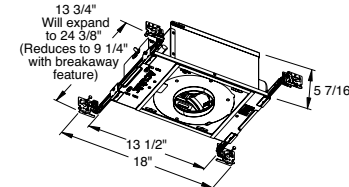
DIMENSIONS



IC43N



TC943N



TC43N

4 1/4" CEILING CUTOUT

(REFER TO INSTRUCTION SHEET FOR FLANGELESS CEILING CUTOUT)

ORDERING INFORMATION

Example: IC43N ELV 120 3ABV BS WHFM FMA3/087

Series / Housing Style	Transformer	Voltage	Option
IC43N 3" Aculux Round MR16 IC Rated, Air tight	ELV Electronic Low Voltage	120	CP ⁸ Chicago Plenum
TC43N 3" Aculux Round MR16 Non-IC	MLV Magnetic Low Voltage	277 ¹	
TC943N 3" Aculux Round MR16 Non-IC Butterfly Brackets			

Trim Style	Reflector Finish	Flange Style / Finish	Environment	Ceiling Installation
ADJUSTABLE ACCENT	BS Black Specular	FLANGED	WET⁹ Wet location	SELF-FLANGED
3AC⁴ Angle-Cut Reflector 45°	CD Clear Diffuse	SF Self Flanged (same finish as reflector)		Ceiling ≤ .875"
3ASLOT⁴ Slot Cut Reflector 45°	CS Clear Specular	WHSF Self Flanged, White painted flange		CTA3/125 Ceiling 0.875" - 1.25"
3AC20⁴ Shallow Angle-Cut Reflector 20°	WTD Wheat Diffuse	BLSF Self Flanged, Black painted flange		CTA3/163 Ceiling 1.25" - 1.625"
3ABAF² Angle-Cut Baffle	B Black Paint	WHR White Trim Ring		CTA3/200 Ceiling 1.625" - 2.00"
3ABV³ Adjustable Bevel	W White Paint	SCR Satin Chrome Trim Ring		FLANGELESS, GYPSUM
3APIN⁵ Adjustable Pinhole, 1 1/4"		ABZR Aged Bronze Trim Ring		FMA3/087 Ceiling ≤ .875"
3APINLG⁵ Adjustable Pinhole, 1 3/4"		FLANGELESS⁴		FMA3/125 Ceiling 0.875" - 1.25"
3AOVAL³ Adjustable Slot Pinhole		FM Flangeless		FMA3/163 Ceiling 1.25" - 1.625"
DOWNLIGHT		WHFM Flangeless, White trim		FLANGELESS, WOOD/STONE/TILE⁷
3DP⁴ Parabolic Downlight Trim		BLFM Flangeless, Black trim		SFM3/087 (B,W) Ceiling ≤ 0.875"
3DH⁴ Hyperbolic Downlight Trim				SFM3/125 (B,W) Ceiling 0.875" - 1.25"
3DBAF² Baffle Downlight Trim				SFM3/163 (B,W) Ceiling 1.25" - 1.625"
3DBV³ Downlight Bevel				
3DPIN⁵ Downlight Pinhole, 1 1/4"				
WALL WASH				
3WW⁴ Wall Wash				

Ordering Notes

¹ Available on TC943N only.

⁴ Not available with B, BLSF, WHFM, BLFM.

⁷ Specify finish: B = Black, W = White.

² Available with B, W, ABZR, WHR, SCR only.

⁵ Available with BS, ABZR, BLSF, SCR, WHSF, BLFM, WHFM only.

⁸ Available with TC43N and TC943N only.

³ Available with BS, BLSF, WHSF, BLFM, WHFM only.

⁶ For Flangeless trims, specify flangeless ceiling installation (FMA3 or SFM3).

⁹ Available with 3ABV, 3AC, 3APIN, 3DBV, 3DP, 3DPIN only.

3" MR16 UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH

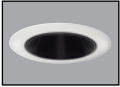
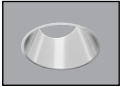
MR16 Halogen

IC43N / TC43N / TC943N

TRIM SELECTION

ADJUSTABLE ACCENT

MAX. LAMP RATING

3AC Angle-Cut Reflector, 45°  Trim Ring	 Self-Flanged	 Flangeless	 *
3ASLOT Slot Cut Reflector, 45°  Trim Ring	 Self-Flanged	 Flangeless	
3AC20 Shallow Angle-Cut Reflector, 20°  Trim Ring	 Self-Flanged	 Flangeless	
3ABAF Angle-Cut Baffle  Trim Ring			
3ABV Adjustable Bevel  Trim Ring	 Flangeless		 *
3APIN Adjustable Pinhole  Trim Ring	 Flangeless		 *
3APINLG Adjustable Pinhole, 1 3/4"  Trim Ring	 Flangeless		
3AOVAL Adjustable Slot Pinhole  Trim Ring	 Flangeless		

IC-Rated (IC43N) : 50W MR16

Non-IC (TC43N) : 75W MR16

Non-IC (TC943N) : 75W MR16

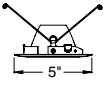
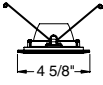
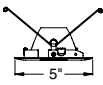
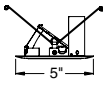
* With WET option

3" MR16 UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH

MR16 Halogen

IC43N / TC43N / TC943N

TRIM SELECTION (continued)

DOWNLIGHT				MAX. LAMP RATING
3DP  Trim Ring	Parabolic Downlight Trim  5"	Aperture : 3 1/4"  Self-Flanged	 Flangeless	 * IC-Rated (IC43N) : 50W MR16
3DBAF  Trim Ring	Baffle Downlight Trim  5"	Aperture : 3 1/4"		Non-IC (TC43N) : 75W MR16
3DBV  Trim Ring	Downlight Bevel  4 5/8"	Aperture : 1 3/4"  Flangeless	 *	
3DPIN  Trim Ring	Downlight Pinhole  5"	Aperture : 1 1/4"  Flangeless	 *	Non-IC (TC943N) : 75W MR16
WALL WASH				MAX. LAMP RATING
3WW  Trim Ring	Lensed Wall Wash  5"	Aperture : 3 1/4"  Self-Flanged	 Flangeless	 * IC-Rated (IC43N) : 50W MR16 Non-IC (TC43N) : 75W MR16 Non-IC (TC943N) : 75W MR16

ACCESSORIES

Cat. #	Description	Cat. #	Description
CGF 200 MPINK	Med. Pink Color Filter	DGF 200 MAGEN	Magenta Dichroic Lens
CGF 200 WRED	Warm Red Color Filter	DGF 200 CYAN	Blue Green Dichroic Lens
CGF 200 DLTBLUE	Daylight Blue Color Filter	DCCF 200 HL4250	Daylight Blue Correction Lens
CGF 200 MBLU	Med. Blue Color Filter	DIFF 200	Diffuse Spread Lens
CGF 200 MAMB	Med. Amber Color Filter	SOLITE 200	Uniformity Lens
CGF 200 MGRN	Med. Green Color Filter	UVF 200	UV Filter Lens
DGF 200 DRED	Red Dichroic Lens	PRISM 200	Prismatic Lens
DGF 200 MGRN	Med. Green Dichroic Lens	LSPREAD 200	Linear Spread Lens
DGF 200 MBLU	Med. Blue Dichroic Lens	HCLBL 200	Hexcell Louver
DGF 200 DYEL	Yellow Dichroic Lens		

To order, specify catalog number.

* With WET option

3" MR16 UNIVERSAL RECESSED ADJUSTABLE TRIMS

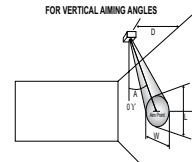
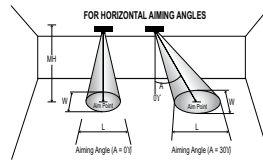
MR16 Halogen

IC43N / TC43N / TC943N

PHOTOMETRICS

CBCP • Centerbeam candlepower
FC • Footcandles at beam center (aim point)

In vertical aiming applications, aim point (X) is determined by dividing distance from the wall (D) by the tangent of the desired aim angle (A) (0.5774 for 30°, 1.0 for 45°).



Lamp	Beam Type	Beam Spread°	Rated Life	CBCP	0°			30°			30°			45°		
					MH	FC	L	W	FC	L	W	D	FC	X	L	W
37W MR16 Halogen IR	NSP	10°	5000	12500	6	347	1.0	1.0	226	1.4	1.2	3	174	5.2	2.1	1.0
					8	195	1.4	1.4	127	1.9	1.6	4	98	6.9	2.9	1.4
					10	125	1.7	1.7	81	2.3	2.0	5	63	8.7	3.6	1.7
					12	87	2.1	2.1	56	2.8	2.4	6	43	10.4	4.3	2.0
	NFL	25°	5000	4400	4	275	1.8	1.8	179	2.4	2.0	2	138	3.5	4.2	1.8
					6	122	2.7	2.7	79	3.6	3.1	3	61	5.2	6.2	2.7
					8	69	3.5	3.5	45	4.8	4.1	4	34	6.9	8.3	3.5
					10	44	4.4	4.4	29	6.0	5.1	5	22	8.7	10.4	4.4
	FL	35°	5000	2200	3	244	1.9	1.9	159	2.6	2.2	2	69	3.5	7.2	2.5
					4	138	2.5	2.5	89	3.5	2.9	3	31	5.2	10.8	3.8
					6	61	3.8	3.8	40	5.2	4.4	4	17	6.9	14.4	5.0
					8	34	5.0	5.0	22	7.0	5.8	5	11	8.7	18.0	6.3
42W MR16 Halogen	VNSP	9°	3500	12300	8	192	1.3	1.3	125	1.7	1.5	4	96	6.9	2.6	1.3
					10	123	1.6	1.6	80	2.1	1.8	5	62	8.7	3.2	1.6
					12	85	1.9	1.9	55	2.5	2.2	6	43	10.4	3.8	1.9
					14	63	2.2	2.2	41	2.9	2.5	7	31	12.1	4.5	2.2
	NSP	15°	6000	9100	6	253	1.6	1.6	164	2.1	1.8	3	126	5.2	3.3	1.6
					8	142	2.1	2.1	92	2.8	2.4	4	71	6.9	4.4	2.1
					10	91	2.6	2.6	59	3.5	3.0	5	46	8.7	5.6	2.6
					12	63	3.2	3.2	41	4.2	3.6	6	32	10.4	6.7	3.2
	NFL	25°	6000	3200	4	200	1.8	1.8	130	2.4	2.0	2	100	3.5	4.2	1.8
					6	89	2.7	2.7	58	3.6	3.1	3	44	5.2	6.2	2.7
					8	50	3.5	3.5	32	4.8	4.1	4	25	6.9	8.3	3.5
					10	32	4.4	4.4	21	6.0	5.1	5	16	8.7	10.4	4.4
	FL	40°	6000	1700	3	189	2.2	2.2	123	3.0	2.5	2	53	3.5	9.7	2.9
					4	106	2.9	2.9	69	4.1	3.4	3	24	5.2	14.5	4.4
					6	47	4.4	4.4	31	6.1	5.0	4	13	6.9	19.3	5.8
					8	27	5.8	5.8	17	8.1	6.7	5	9	8.7	24.2	7.3
50W MR16 Halogen IR Lensed	SP	10°	5000	15000	6	417	1.0	1.0	217	1.4	1.2	3	208	5.2	2.1	1.0
					8	234	1.4	1.4	152	1.9	1.6	4	117	6.9	2.9	1.4
					10	150	1.7	1.7	97	2.3	2.0	5	75	8.7	3.6	1.7
					12	104	2.1	2.1	68	2.8	2.4	6	52	10.4	4.3	2.1
	NFL	25°	5000	5700	4	356	1.8	1.8	231	2.1	2.0	2	178	3.5	4.2	1.8
					6	158	2.7	2.7	103	3.6	3.1	3	79	5.2	6.2	2.7
					8	89	3.5	3.5	58	4.8	4.1	4	45	6.9	8.3	3.5
					10	57	4.4	4.4	37	6.0	5.1	5	29	8.7	10.4	4.4
	FL	35°	5000	2850	3	317	1.9	1.9	206	2.6	2.2	2	89	3.5	7.2	2.5
					4	178	2.5	2.5	116	3.5	2.9	3	40	5.2	10.8	3.8
					6	79	3.8	3.8	51	5.2	4.4	4	22	6.9	14.4	5.0
					8	45	5.0	5.0	29	7.0	5.8	5	14	8.7	18.0	6.3
71W MR16 Halogen	SP	15°	4000	11500	6	319	1.6	1.6	207	2.1	1.8	3	160	5.2	3.3	1.6
					8	180	2.1	2.1	117	2.8	2.4	4	90	6.9	4.4	2.1
					10	115	2.6	2.6	75	3.5	3.0	5	58	8.7	5.6	2.6
					12	80	3.2	3.2	52	4.2	3.6	6	40	10.4	6.7	3.2
	NFL	25°	4000	5500	4	344	1.8	1.8	223	2.4	2.0	2	172	3.5	4.2	1.8
					6	153	2.7	2.7	99	3.6	3.1	3	76	5.2	6.2	2.7
					8	86	3.5	3.5	56	4.8	4.1	4	43	6.9	8.3	3.5
					10	55	4.4	4.4	36	6.0	5.1	5	28	8.7	10.4	4.4
	FL	40°	4000	2200	3	244	2.2	2.2	159	3.0	2.5	2	69	3.5	9.7	2.9
					4	138	2.9	2.9	89	4.1	3.4	3	31	5.2	14.5	4.4
					6	61	4.4	4.4	40	6.1	5.0	4	17	6.9	19.3	5.8
					8	34	5.8	5.8	22	8.1	6.7	5	11	8.7	24.2	7.3

The beam spread in degrees and the beam "L" and "W" in the following tables are computed at 50% of centerbeam candlepower and represent areas of "effective illumination."

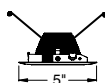
3DBAF

Baffle Downlight Trim

Aperture : 3 1/4"



Trim Ring



3" MR16 UNIVERSAL RECESSED DOWNLIGHT

MR16 Halogen

IC43N / TC43N / TC943N with 3DBAF Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC43N 3DBAF B WHR

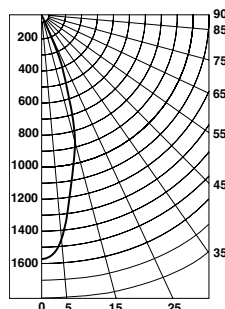
Test Number: PT12090802

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.



Candlepower Distribution

Angle	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

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'

Luminaire 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

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	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

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	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			

PHOTOMETRIC REPORT

Catalog Number: TC43N 3DBAF W WHR

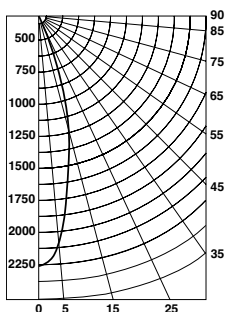
Test Number: PT12091501

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.



Candlepower Distribution

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

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'

Luminaire 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

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	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

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

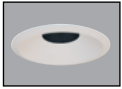
Effective Floor Reflectance 20%

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	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			

3DBV

Downlight Bevel

Aperture : 1 3/4"



Trim Ring



Flangeless



3" MR16 UNIVERSAL RECESSED

DOWNLIGHT

MR16 Halogen

IC43N / TC43N / TC943N with 3DBV Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC43N 3DBV BS WHSF

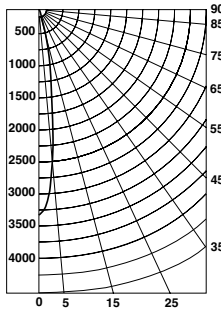
Test Number: PT12091004

Total Luminaire Efficiency: 53.8%

Luminaire Spacing Criteria: 0.32

Luminaire: 1 3/4" Regressed Pinhole Trim. Open Aperture.

Lamps: One 37MR16/IR/SP10/C, rated at 800 total lumens.

Candlepower Distribution
(Candelas)

Angle	Candela	Lumens
0°	3343	
5°	2468	236
15°	556	158
25°	71	33
35°	6	4
45°	0	0
55°	0	0
65°	0	0
75°	0	0
85°	0	0

Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	92.9	45.2	1.6'
7'	68.2	33.2	1.9'
8'	52.2	25.4	2.1'
9'	41.3	20.1	2.4'
10'	33.4	16.3	2.7'
11'	27.6	13.5	2.9'
12'	23.2	11.3	3.2'
13'	19.8	9.6	3.5'
14'	17.1	8.3	3.7'
15'	14.9	7.2	4.0'

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°	426	53.3	99.1
0-40°	430	53.8	100.0
0-60°	430	53.8	100.0
0-90°	430	53.8	100.0
90-180°	0	0.0	0.0
0-180°	430	53.8	100.0

AVERAGE INITIAL FOOTCANDLES

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

Luminaire	Room Cavity Ratio		
Spacing	RCR1	RCR3	RCR5
4' x 4'	31	29	27
5' x 5'	20	18	17
6' x 6'	14	13	12
7' x 7'	11	10	10
8' x 8'	9	8	8
9' x 9'	7	6	6
10' x 10'	5	5	4
12' x 12'	3	3	3

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	0
0	64	64	64	64	63	63	63	63	60	60	60	57	57	57	55	55	55	54
1	62	61	60	60	61	60	59	59	58	57	57	56	56	55	54	54	54	53
2	61	59	58	56	59	58	57	56	56	55	55	55	54	53	53	53	52	52
3	59	57	55	54	58	56	55	54	55	54	53	54	53	52	53	52	51	51
4	58	55	54	52	57	55	53	52	54	52	51	53	52	51	52	51	50	50
5	56	54	52	51	56	53	52	50	53	51	50	52	51	50	51	50	49	49
6	55	53	51	49	55	52	50	49	51	50	49	51	50	49	50	49	48	48
7	54	51	50	48	54	51	49	48	50	49	48	50	49	48	49	48	47	47
8	53	50	48	47	53	50	48	47	50	48	47	49	48	47	49	48	47	46
9	52	49	48	46	52	49	47	46	49	47	46	48	47	46	48	47	46	45
10	51	48	47	46	51	48	47	45	48	46	45	48	46	45	47	46	45	45

PHOTOMETRIC REPORT

Catalog Number: TC43N 3DBV BS WHSF

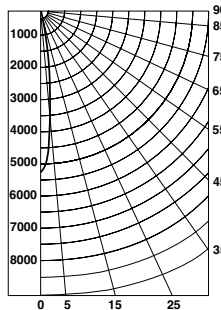
Test Number: PT12091006

Total Luminaire Efficiency: 47.9%

Luminaire Spacing Criteria: 0.29

Luminaire: 1 3/4" Regressed Pinhole Trim. Open Aperture.

Lamps: One 50MR16/IR/SP10/C, rated at 1200 total lumens.

Candlepower Distribution
(Candelas)

Angle	Candela	Lumens
0°	5202	
5°	3594	343
15°	660	187
25°	80	37
35°	11	7
45°	1	1
55°	0	0
65°	0	0
75°	0	0
85°	0	0

Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	144.5	70.7	1.4'
7'	106.2	51.9	1.7'
8'	81.3	39.8	1.9'
9'	64.2	31.4	2.2'
10'	52.0	25.5	2.4'
11'	43.0	21.0	2.6'
12'	36.1	17.7	2.9'
13'	30.8	15.1	3.1'
14'	26.5	13.0	3.4'
15'	23.1	11.3	3.6'

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	66	228
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	567	47.2	98.7
0-40°	574	47.8	99.9
0-60°	575	47.9	100.0
0-90°	575	47.9	100.0
90-180°	0	0.0	0.0
0-180°	575	47.9	100.0

AVERAGE INITIAL FOOTCANDLES

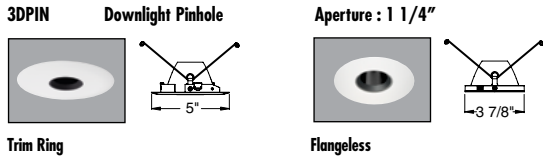
Reflectances: 80% Ceiling, 50% Walls, 20% Floors

Luminaire	Room Cavity Ratio		
Spacing	RCR1	RCR3	RCR5
4' x 4'	41	38	36
5' x 5'	26	24	23
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'	7	6	6
12' x 12'	5	4	4

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	0
0	57	57	57	57	56	56	56	56	53	53	53	51	51	51	49	49	49	48
1	55	55	54	53	54	54	53	52	52	51	51	50	50	49	48	48	48	47
2	54	53	51	50	53	52	51	50	50	49	49	49	48	48	48	47	47	46
3	53	51	49	48	52	50	49	48	49	48	47	48	47	47	47	46	46	45
4	52	49	48	47	51	49	48	47	48	47	46	47	46	46	46	46	45	45
5	51	48	47	46	50	48	46	45	47	46	45	46	45	45	46	45	44	44
6	50	47	46	44	49	47	45	44	46	45	44	46	45	44	45	44	44	43
7	49	46	45	44	48	46	44	43	45	44	43	45	44	43	45	44	43	42
8	48	45	44	43	47	45	44	43	45	43	42	44	43	42	44	43	42	42
9	47	44	43	42	47	44	43	42	44	43	42	44	43	42	43	42	42	41
10	46	44	42	41	46	44	42	41	43	42	41	43	42	41	43	42	41	41



3" MR16 UNIVERSAL RECESSED

DOWNLIGHT

MR16 Halogen

IC43N / TC43N / TC943N with 3DPIN Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC43N 3DPIN BS WHSF

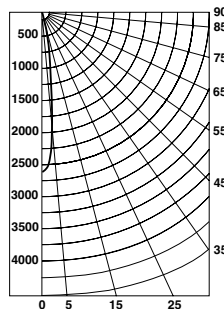
Test Number: PT12091001

Total Luminaire Efficiency: 38.2%

Luminaire Spacing Criteria: 0.32

Luminaire: 1 1/4" Pinhole Trim. Open Aperture.

Lamps: One 37MR16/IR/SP10/C, rated at 800 total lumens.



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	2581	
5°	2011	192
15°	376	107
25°	15	7
35°	0	0
45°	0	0
55°	0	0
65°	0	0
75°	0	0
85°	0	0

Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	71.7	34.9	1.6'
7'	52.7	25.7	1.9'
8'	40.3	19.6	2.1'
9'	31.9	15.5	2.4'
10'	25.8	12.6	2.7'
11'	21.3	10.4	2.9'
12'	17.9	8.7	3.2'
13'	15.3	7.4	3.5'
14'	13.2	6.4	3.7'
15'	11.5	5.6	4.0'

Luminance Data

Ang in Deg	Footlamberts	Candela/M²
45	0	0
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	305	38.2	100.0
0-40°	305	38.2	100.0
0-60°	305	38.2	100.0
0-90°	305	38.2	100.0
90-180°	0	0.0	0.0
0-180°	305	38.2	100.0

AVERAGE INITIAL FOOTCANDLES

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

Luminaire	Room Cavity Ratio		
Spacing	RCR1	RCR3	RCR5
4' x 4'	22	21	20
5' x 5'	14	13	12
6' x 6'	10	9	9
7' x 7'	8	7	7
8' x 8'	6	6	6
9' x 9'	5	4	4
10' x 10'	4	3	3
12' x 12'	2	2	2

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	0
0	45	45	45	45	44	44	44	44	42	42	42	41	41	41	39	39	39	38
1	44	44	43	42	43	43	42	42	41	41	41	40	40	39	39	38	38	38
2	43	42	41	40	42	41	41	40	40	40	39	39	39	38	38	38	38	37
3	42	41	40	39	42	40	39	39	39	39	38	39	38	37	38	37	37	36
4	41	40	39	38	41	39	38	38	39	38	37	38	37	37	37	37	36	36
5	41	39	38	37	40	39	38	37	38	37	36	38	37	36	37	36	36	36
6	40	38	37	36	40	38	37	36	37	36	36	37	36	36	37	36	35	35
7	39	37	36	35	39	37	36	35	37	36	35	37	36	35	36	35	35	35
8	39	37	36	35	38	37	36	35	36	35	35	36	35	35	36	35	34	34
9	38	36	35	34	38	36	35	34	36	35	34	36	35	34	35	35	34	34
10	38	36	35	34	37	36	35	34	35	34	34	35	34	34	35	34	34	33

PHOTOMETRIC REPORT

Catalog Number: TC43N 3DPIN BS WHSF

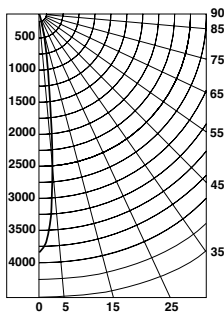
Test Number: PT12091605

Total Luminaire Efficiency: 30.8%

Luminaire Spacing Criteria: 0.28

Luminaire: 1 1/4" Pinhole Trim. Open Aperture.

Lamps: One 50MR16/IR/SP10/C, rated at 1200 total lumens.



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	3831	
5°	2647	253
15°	381	108
25°	18	8
35°	0	0
45°	0	0
55°	0	0
65°	0	0
75°	0	0
85°	0	0

Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	106.4	52.2	1.4'
7'	78.2	38.3	1.6'
8'	59.9	29.3	1.8'
9'	47.3	23.2	2.1'
10'	38.3	18.8	2.3'
11'	31.7	15.5	2.5'
12'	26.6	13.0	2.8'
13'	22.7	11.1	3.0'
14'	19.5	9.6	3.2'
15'	17.0	8.3	3.4'

Luminance Data

Ang in Deg	Footlamberts	Candela/M²
45	0	0
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	369	30.8	100.0
0-40°	369	30.8	100.0
0-60°	369	30.8	100.0
0-90°	369	30.8	100.0
90-180°	0	0.0	0.0
0-180°	369	30.8	100.0

AVERAGE INITIAL FOOTCANDLES

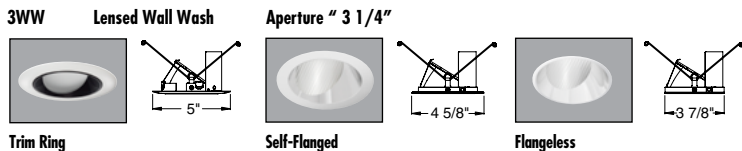
Reflectances: 80% Ceiling, 50% Walls, 20% Floors

Luminaire	Room Cavity Ratio		
Spacing	RCR1	RCR3	RCR5
4' x 4'	26	25	24
5' x 5'	17	16	15
6' x 6'	12	11	11
7' x 7'	9	9	9
8' x 8'	7	7	7
9' x 9'	6	5	5
10' x 10'	4	4	4
12' x 12'	3	3	3

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	0
0	37	37	37	37	36	36	36	36	34	34	34	33	33	33	31	31	31	31
1	36	35	35	34	35	35	34	34	33	33	33	32	32	32	31	31	31	30
2	35	34	33	33	34	34	33	32	33	32	32	32	31	31	31	31	30	30
3	34	33	32	32	34	33	32	31	32	31	31	31	31	30	31	30	30	30
4	34	32	31	31	33	32	31	31	31	31	30	31	30	30	30	30	30	29
5	33	32	31	30	33	31	31	30	31	30	30	30	30	29	30	30	29	29
6	32	31	30	29	32	31	30	29	30	30	29	30	29	29	30	29	29	29
7	32	31	30	29	32	30	30	29	30	29	29	30	29	29	30	29	29	28
8	31	30	29	29	31	30	29	29	30	29	29	29	29	28	29	29	28	28
9	31	30	29	28	31	30	29	28	29	29	28	29	28	28	29	28	28	28
10	31	29	28	28	30	29	28	28	29	28	28	29	28	28	29	28	28	27



3" MR16 UNIVERSAL RECESSED WALL WASH

MR16 Halogen

IC43N / TC43N / TC943N with 3WW Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC43N 3WW CS WHR

Test Number: PT03101003

Total Luminaire Efficiency: 63.8%

Luminaire Spacing Criteria @ 90°: 0.70

Luminaire: Clear Alzak® finish, lensed angle cut wall wash trim.

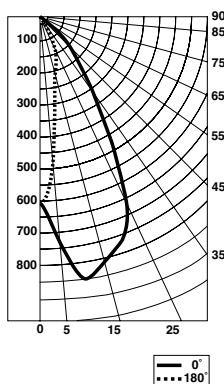
Lamps: One 37MR16/IR/FL35/C, rated at 800 total lumens.

Luminance Data

Ang in Deg	Footlamberts	Candela/M²
45	1086	3723
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	334	41.7	65.4
0-40°	426	53.3	83.5
0-60°	502	62.8	98.5
0-90°	510	63.8	100.0
90-180°	0	0.0	0.0
0-180°	510	63.8	100.0



Candlepower Distribution (Candelas)

Degrees Vertical	0° Wall Wash	180° Downlight
0°	603	603
5°	742	481
15°	816	207
25°	664	129
35°	309	41
45°	173	16
55°	63	0
65°	21	0
75°	8	0
85°	0	0

Footcandles on Wall from Multiple Fixtures

Fixture Distance to Wall Fixture Centers (spacing)	18"			24"			18"			24"		
	18"	24"	30"	18"	24"	30"	18"	24"	30"	18"	24"	30"
1'	18	12	18	16	7	16	7	6	7	6	4	6
2'	38	39	38	31	24	31	25	24	25	20	17	20
3'	37	35	37	30	25	30	28	30	28	22	23	22
4'	30	27	30	22	21	22	28	26	28	21	20	21
5'	21	20	21	16	15	16	24	22	24	18	17	18
6'	15	15	15	11	11	11	19	19	19	14	14	14
7'	11	11	11	8	8	8	14	15	14	11	11	11
8'	9	9	9	7	6	7	11	11	11	9	8	9
9'	7	7	7	5	5	5	9	9	9	7	7	7

*Multipliers: Black - 0.7, Diffuse - 0.95

*Note: Multipliers are provided for estimating purposes only.
Use IES photometric files for precise photometric information.

PHOTOMETRIC REPORT

Catalog Number: TC43N 3WW CS WHR

Test Number: PT03101102

Total Luminaire Efficiency: 61.9%

Luminaire Spacing Criteria @ 90°: 0.65

Luminaire: Clear Alzak® finish, lensed angle cut wall wash trim.

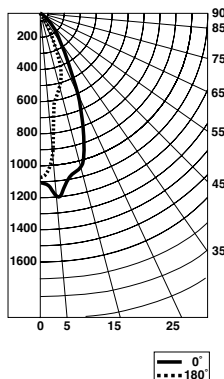
Lamps: One 50MR16/IR/FL35, rated at 1200 total lumens.

Luminance Data @ 180° Downlight

Ang in Deg	Footlamberts	Candela/M²
45	2968	10169
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	512	42.6	68.9
0-40°	626	52.2	84.3
0-60°	727	60.6	97.9
0-90°	742	61.9	100.0
90-180°	0	0.0	0.0
0-180°	742	61.9	100.0



Candlepower Distribution (Candelas)

Degrees Vertical	0° Wall Wash	180° Downlight
0°	1075	1075
5°	1177	924
15°	998	506
25°	606	272
35°	270	112
45°	167	45
55°	77	0
65°	43	0
75°	14	0
85°	0	0

Footcandles on Wall from Multiple Fixtures

Fixture Distance to Wall Fixture Centers (spacing)	18"			24"			18"			24"		
	18"	24"	30"	18"	24"	30"	18"	24"	30"	18"	24"	30"
1'	26	21	26	22	13	22	14	11	14	11	8	11
2'	38	34	38	30	24	30	27	26	27	21	19	21
3'	35	34	35	29	24	29	26	26	26	21	19	21
4'	34	31	34	25	24	25	27	26	27	20	20	20
5'	26	24	26	19	19	19	26	24	26	20	18	20
6'	19	19	19	14	14	14	22	22	22	17	16	17
7'	14	15	14	11	11	11	18	18	18	14	13	14
8'	11	12	11	9	9	9	14	15	14	11	11	11
9'	10	10	10	7	7	7	12	12	12	9	9	9

*Multipliers: Black - 0.7, Diffuse - 0.95

*Note: Multipliers are provided for estimating purposes only.
Use IES photometric files for precise photometric information.