

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
Socket Medium base porcelain socket with nickel plated copper screw shell.
Lamp One 50W PAR20 or 75W PAR16 lamp max. (See trim for max. lamp rating)
Adjustability Acu-Aim™ precision geared hot-aiming achieves 370° rotation, 40° tilt • Optimized center lamp beam optics translates lamp forward as it is aimed off nadir, insuring 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.
Codes/Labels UL and cUL listed • IC13N rated for direct contact with insulation, through-branch wiring, v damp locations (wet location with approved trims) • Meets energy code Air Leakage requirements per ASTM E283
 • Product thermally protected • Union made.

Proprietary Bar Hanger System Patent pending Pro-VI™, telescoping bar hanger system with locking set screws, permits quick placement of housing within 24" O.C. joists or suspended ceilings • Robust bar eliminates flexing regardless of fixture position • Integral T-bar notch with locking tabs secures housing to suspended ceiling grid • Captive bugle-headed ring shank nail for quick one-step installation • Bar Hanger foot aligns to bottom of construction joist and breaks away for use in suspended ceilings.

Junction Box IC13N rated for 4 No. 12 AWG 90° C through branch circuit conductors. • TC13N 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 Steel plaster frame and aluminum housing painted black 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.

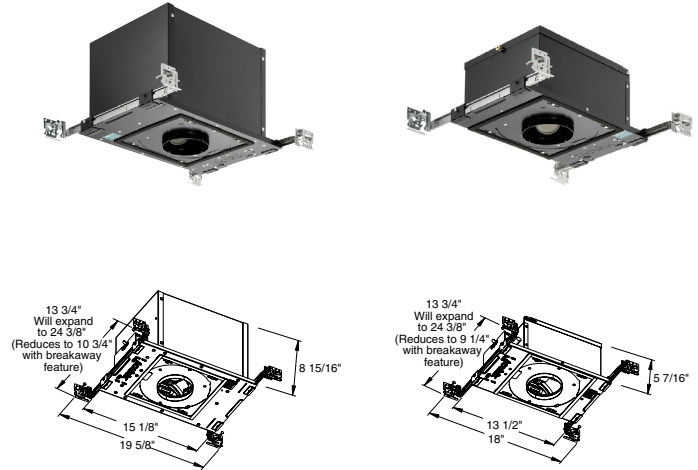
Specification subject to change without notice.

Buy American Act This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

3" PAR16/PAR20 UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH



PAR16 or PAR20 Halogen
IC13N / TC13N



IC13N

TC13N

4 1/4" CEILING CUTOUT
 (4 3/8" FOR FLANGELESS)

ORDERING INFORMATION

Example: IC13N 3ABV BS WHFM FMA3/087

HOUSING INFO

Series / Housing Style	Option
IC13N 3" Aculux Round PAR16/PAR20 IC Air Tight	CP ⁷ Chicago Plenum
TC13N 3" Aculux Round PAR16/PAR20 Non-IC	

TRIM OPTIONS

Trim Style	Reflector Finish	Flange Style / Finish	Environment	Ceiling Installation
ADJUSTABLE ACCENT		FLANGED	WET ⁸ Wet location	SELF-FLANGED
3AC ³ Angle-Cut Reflector 45°	BS Black Specular	SF Self Flanged (same finish as reflector)		— Ceiling ≤ .875"
3ASLOT ³ Slot Cut Reflector 45°	CD Clear Diffuse	WHSF Self Flanged, White painted flange		CTA3/125 Ceiling 0.875" - 1.25"
3AC20 ³ Shallow Angle-Cut Reflector 20°	CS Clear Specular	BLSF Self Flanged, Black painted flange		CTA3/163 Ceiling 1.25" - 1.625"
3ABAF ¹ Angle-Cut Baffle	WTD Wheat Diffuse	WHR White Trim Ring		CTA3/200 Ceiling 1.625" - 2"
3ABV ² Adjustable Bevel	B Black Paint	FLANGELESS ⁵		FLANGELESS, GYPSUM
3APIN ⁴ Adjustable Pinhole, 1 1/4"	W White Paint	FM Flangeless		FMA3/087 Ceiling ≤ .875"
3APINLG ⁴ Adjustable Pinhole, 1 3/4"		WHFM Flangeless, White trim		FMA3/125 Ceiling 0.875" - 1.25"
3AOVAL ² Adjustable Slot Pinhole		BLFM Flangeless, Black trim		FMA3/163 Ceiling 1.25" - 1.625"
				FLANGELESS, WOOD/STONE/TILE ⁶
				SFM3/087 (B,W) Ceiling ≤ 0.875"
				SFM3/125 (B,W) Ceiling 0.875" - 1.25"
				SFM3/163 (B,W) Ceiling 1.25" - 1.625"

NOTES

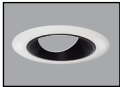
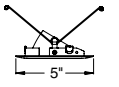

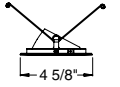



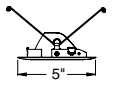

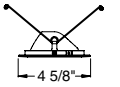

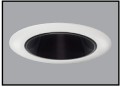
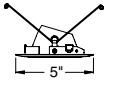

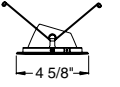
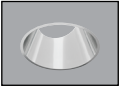



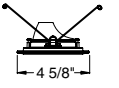



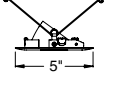



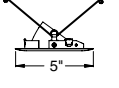

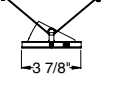

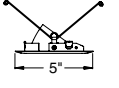

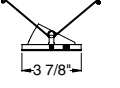
Ordering Notes			
¹ Available with B, W, WHR only.	⁴ Available with BS, BLSF, WHSF, BLFM, WHFM only.	⁷ CP available on TC13N only	
² Available with BS, BLSF, WHSF, BLFM, WHFM only.	⁵ For Flangeless trims, specify flangeless ceiling installation (FMA3 or SFM3)	⁸ Available with 3ABV, 3AC, 3APIN, 3DBV, 3DP, 3DPIN only.	
³ Not available with B, BLSF, WHFM, BLFM.	⁶ Specify finish : B = Black, W = White.		

3" PAR16/PAR20 UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH

PAR16 or PAR20 Halogen

IC13N / TC13N

TRIM SELECTION

ADJUSTABLE ACCENT				MAX. LAMP RATING	
3AC Angle-Cut Reflector, 45°      	Aperture : 3 1/4"			IC-Rated (IC13N): 60W PAR16, 50W PAR20 <hr/> IC-Rated WET Option (IC13N): 45W PAR16, 50W PAR20 <hr/> Non-IC (TC13N): 75W PAR16, 50W PAR20	
3ASLOT Slot Cut Reflector, 45°     	Aperture : 3 1/4"				
3AC20 Shallow Angle-Cut Reflector, 20°     	Aperture : 3 1/4"				
3ABAF Angle-Cut Baffle, 45°  	Aperture : 3 1/4"				
3ABV Adjustable Bevel, 45°    	Aperture : 1 3/4"				
3APIN Adjustable Pinhole, 45°    	Aperture : 1 1/4"				
3APINLG Adjustable Pinhole, 1 3/4", 45°    	Aperture : 1 3/4"				
3AOVAL Adjustable Slot Pinhole, 45°    	Aperture : 1 3/4" x 2 1/2"				


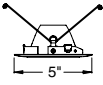



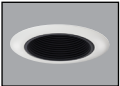

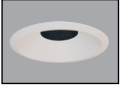
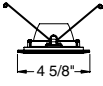



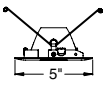



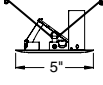



* With WET option

3" PAR16/PAR20 UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH

PAR16 or PAR20 Halogen

IC13N / TC13N

TRIM SELECTION (continued)

DOWNLIGHT				MAX. LAMP RATING	
3DP  Trim Ring	Parabolic Downlight Trim  5"	Aperture : 3 1/4"  Self-Flanged	 Flangeless	 *	IC-Rated (IC13N): 60W PAR16, 50W PAR20 IC-Rated WET Option (IC13N): 45W PAR16, 50W PAR20 Non-IC (TC13N): 75W PAR16, 50W PAR20
3DBAF  Trim Ring	Baffle Downlight Trim  5"	Aperture : 3 1/4"			
3DBV  Self-Flanged	Downlight Bevel  4 5/8"	Aperture : 1 3/4"  Flangeless		 *	
3DPIN  Self-Flanged	Downlight Pinhole  5"	Aperture : 1 1/4"  Flangeless		 *	
WALL WASH				MAX. LAMP RATING	
3WW  Trim Ring	Lensed Wall Wash  5"	Aperture : 3 1/4"  Self-Flanged	 Flangeless	 *	IC-Rated WET Option (IC13N): 45W PAR16, 50W PAR20 Non-IC (TC13N): 75W PAR16, 50W PAR20

* With WET option

3" PAR16/PAR20 UNIVERSAL RECESSED ADJUSTABLE TRIMS

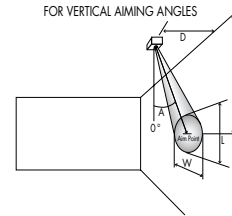
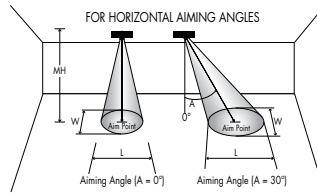
PAR16 or PAR20 Halogen

IC13N / TC13N

PHOTOMETRICS

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

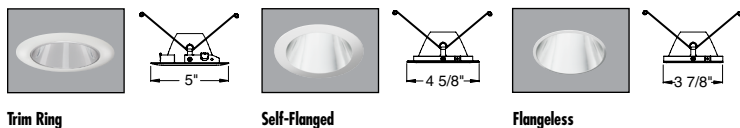
In vertical aiming applications, aim point (X) is determined by dividing distance from the wall (D) by the tangent of the desired aim angle (A) (0.5774 for 30°, 1.0 for 45°).



Lamp	Beam Type	Beam Spread°	Rated Life	CBCP	0°				30°			30°				40°				
					MH	FC	L	W	FC	L	W	D	FC	X	L	W	FC	X	L	W
50W PAR20 Halogen	SP	10°	2500	4600	6	128	1.0	1.0	83	1.4	1.2	2	144	3.5	5.5	2.1	305	2.4	0.9	0.5
					8	72	1.4	1.4	47	1.9	1.6	3	64	5.0	2.1	1.0	136	3.6	1.3	0.8
					10	46	1.7	1.7	30	2.3	2.0	4	36	6.9	2.9	1.4	76	4.8	1.7	1.1
					12	32	2.1	2.1	21	2.8	2.4	5	23	8.7	3.6	1.7	49	6.0	2.1	1.4
	FL	30°	2500	1200	4	75	2.1	2.1	49	2.9	2.5	2	38	3.5	5.5	2.1	80	2.4	2.9	1.7
					5	48	2.7	2.7	31	3.7	3.1	3	17	5.2	8.2	3.2	35	3.6	4.3	2.5
					6	33	3.2	3.2	22	4.4	3.7	4	9	6.9	10.9	4.3	20	4.8	5.8	3.3
					7	25	3.8	3.8	16	5.1	4.3	5	6	8.7	13.7	5.4	13	6.0	7.2	4.2
8	19	4.3	4.3	12	5.9	5.0	6	4	10.4	16.4	6.4	9	7.2	8.7	5.0					
45W PAR16 Halogen	NSP	10°	2000	5000	6	139	1.0	1.0	90	1.4	1.2	2	156	3.5	1.4	0.7	332	2.4	0.9	0.5
					8	78	1.4	1.4	51	1.9	1.6	3	69	5.2	2.1	1.0	148	3.6	1.3	0.8
					10	50	1.7	1.7	32	2.3	2.0	4	39	6.9	2.9	1.4	83	4.8	1.7	1.1
					12	35	2.1	2.1	23	2.8	2.4	5	25	8.7	3.6	1.7	53	6.0	2.1	1.4
	NFL	27°	2000	1400	3	156	1.4	1.4	101	2.0	1.7	1	175	1.7	2.3	1.0	372	1.2	1.4	0.8
					5	56	2.4	2.4	36	3.3	2.8	2	44	3.5	4.6	1.9	93	2.4	2.9	1.7
					7	29	3.4	3.4	19	4.6	3.9	3	19	5.2	7.0	2.9	41	3.6	4.3	2.5
					9	17	4.3	4.3	11	5.9	5.0	4	11	6.9	9.3	3.8	23	4.8	5.8	3.3
11	12	5.3	5.3	8	7.2	6.1	5	7	8.7	11.6	4.8	15	6.0	7.2	4.2					
60W PAR16 Halogen	NSP	10°	2000	5400	6	150	1.0	1.0	97	1.4	1.2	2	169	3.5	1.4	0.7	359	2.4	0.9	0.5
					8	84	1.4	1.4	55	1.9	1.6	3	75	5.2	2.1	1.0	159	3.6	1.3	0.8
					10	54	1.7	1.7	35	2.3	2.0	4	42	6.9	2.9	1.4	90	4.8	1.7	1.1
					12	38	2.1	2.1	24	2.8	2.4	5	27	8.7	3.6	1.7	57	6.0	2.1	1.4
	NFL	30°	2000	1550	4	97	2.1	2.1	63	2.9	2.5	2	48	3.5	5.5	2.1	103	2.4	2.9	1.7
					6	43	3.2	3.2	28	4.4	3.7	3	22	5.2	8.2	3.2	46	3.6	4.3	2.5
					8	24	4.3	4.3	16	5.9	5.0	4	12	6.9	10.9	4.3	26	4.8	5.8	3.3
					10	16	5.4	5.4	10	7.3	6.2	5	8	8.7	13.7	5.4	16	6.0	7.2	4.2
12	11	6.4	6.4	7	8.8	7.4	6	5	10.4	16.4	6.4	11	7.2	8.7	5.0					
75W PAR16 Halogen	NSP	10°	2000	7500	6	208	1.0	1.0	135	1.4	1.2	2	234	3.5	1.4	0.7	498	2.4	0.9	0.5
					8	117	1.4	1.4	76	1.9	1.6	3	104	5.2	2.1	1.0	221	3.6	1.3	0.8
					10	75	1.7	1.7	49	2.3	2.0	4	59	6.9	2.9	1.4	124	4.8	1.7	1.1
					12	52	2.1	2.1	34	2.8	2.4	5	38	8.7	3.6	1.7	80	6.0	2.1	1.4
	NFL	30°	2000	1900	4	119	2.1	2.1	77	2.9	2.5	2	59	3.5	5.5	2.1	126	2.4	2.9	1.7
					6	53	3.2	3.2	34	4.4	3.7	3	26	5.2	8.2	3.2	56	3.6	4.3	2.5
					8	30	4.3	4.3	19	5.9	5.0	4	15	6.9	10.9	4.3	32	4.8	5.8	3.3
					10	19	5.4	5.4	12	7.3	6.2	5	10	8.7	13.7	5.4	20	6.0	7.2	4.2
12	13	6.4	6.4	9	8.8	7.4	6	7	10.4	16.4	6.4	14	7.2	8.7	5.0					

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."

3DP Parabolic Downlight Trim



3" PAR16/PAR20 UNIVERSAL RECESSED DOWNLIGHT

PAR16 or PAR20 Halogen
IC13N / TC13N with 3DP Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC13N 3DP CS WHR

Test Number: PT12092903

Total Luminaire Efficiency: 71.5%

Luminaire Spacing Criteria: 0.34

Luminaire: Clear specular Alzak® downlight trim. Open aperture.

Lamps: One 60PAR16/HAL/NFL30, rated at 650 total lumens.

Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	62.5	29.9	2.1'
7'	45.9	22.0	2.4'
8'	35.1	16.8	2.7'
9'	27.8	13.3	3.1'
10'	22.5	10.8	3.4'
11'	18.6	8.9	3.8'
12'	15.6	7.5	4.1'
13'	13.3	6.4	4.5'
14'	11.5	5.5	4.8'
15'	10.0	4.8	5.2'

AVERAGE INITIAL FOOTCANDLES

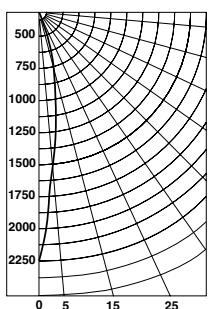
Reflectances: 80% Ceiling, 50% Walls, 20% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	33	30	28
5' x 5'	21	19	18
6' x 6'	15	13	12
7' x 7'	12	11	10
8' x 8'	9	9	8
9' x 9'	7	7	6
10' x 10'	5	5	4
12' x 12'	4	3	3

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80		70		50		30		10		0							
	PW	70	50	30	10	50	30	10	50	30	10	0						
0	85	85	85	85	83	83	83	83	79	79	79	76	76	76	73	73	73	71
1	82	81	79	78	80	79	78	77	76	75	74	74	73	72	71	71	70	69
2	79	77	75	73	78	76	74	72	73	72	71	71	70	69	70	69	68	67
3	77	74	71	69	76	73	70	68	71	69	67	69	68	66	68	66	65	64
4	74	71	68	66	73	70	67	65	68	66	64	67	65	64	66	64	63	62
5	72	68	65	63	71	67	65	62	66	64	62	65	63	61	64	62	61	60
6	70	65	62	60	69	65	62	60	64	62	60	63	61	59	62	60	59	58
7	68	63	60	58	67	63	60	58	62	60	58	61	59	57	61	59	57	56
8	66	61	58	56	65	61	58	56	60	58	56	60	57	56	59	57	55	55
9	64	59	56	54	64	59	56	54	58	56	54	58	56	54	57	55	54	53
10	62	58	55	53	62	57	54	53	57	54	52	56	54	52	56	54	52	52



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	7249	
5°	1536	147
15°	722	205
25°	227	105
35°	13	8
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°	456	70.2	98.2
0-40°	465	71.5	100.0
0-60°	465	71.5	100.0
0-90°	465	71.5	100.0
90-180°	0	0.0	0.0
0-180°	465	71.5	100.0

PHOTOMETRIC REPORT

Catalog Number: TC13N 3DP CS WHR

Test Number: PT01100405

Total Luminaire Efficiency: 67.5%

Luminaire Spacing Criteria: 0.46

Luminaire: Clear specular Alzak® downlight trim. Open aperture.

Lamps: One 75PAR16/HAL/NFL30, rated at 900 total lumens.

Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	56.2	25.8	2.9'
7'	41.3	19.0	3.4'
8'	31.6	14.5	3.9'
9'	25.0	11.5	4.3'
10'	20.2	9.3	4.8'
11'	16.7	7.7	5.3'
12'	14.1	6.5	5.8'
13'	12.0	5.5	6.3'
14'	10.3	4.7	6.8'
15'	9.0	4.1	7.2'

AVERAGE INITIAL FOOTCANDLES

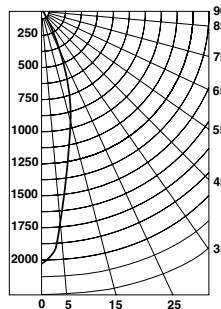
Reflectances: 80% Ceiling, 50% Walls, 20% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	43	39	35
5' x 5'	27	25	23
6' x 6'	19	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	50	30	10	50	30	10	0						
0	80	80	80	80	79	79	79	79	75	75	75	72	72	72	69	69	69	68
1	78	76	75	74	76	75	73	72	72	71	70	69	69	68	67	67	66	65
2	75	72	70	68	73	71	69	68	69	68	66	67	66	65	65	64	63	62
3	72	69	66	64	71	68	66	64	66	64	63	65	63	62	63	62	61	60
4	70	66	63	61	69	65	63	61	64	62	60	63	61	59	62	60	59	58
5	68	63	60	58	67	63	60	58	62	59	58	61	59	57	60	58	57	56
6	65	61	58	56	65	60	58	56	60	57	55	59	57	55	58	56	55	54
7	63	59	56	54	63	58	55	53	58	55	53	57	55	53	56	54	53	52
8	61	57	54	52	61	56	53	51	56	53	51	55	53	51	54	52	51	50
9	59	55	52	50	59	54	52	50	54	51	50	53	51	49	53	51	49	49
10	58	53	50	48	57	53	50	48	52	50	48	52	49	48	51	49	48	47



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	2024	
5°	1744	166
15°	930	264
25°	352	163
35°	23	15
45°	0	0
55°	0	0
65°	0	0
75°	0	0
85°	0	0

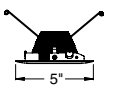
Luminance Data

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°	593	65.9	97.6
0-40°	608	67.5	100.0
0-60°	608	67.5	100.0
0-90°	608	67.5	100.0
90-180°	0	0.0	0.0
0-180°	608	67.5	100.0

3DBAF Baffle Downlight Trim



Trim Ring

3" PAR16/PAR20 UNIVERSAL RECESSED DOWNLIGHT

PAR16 or PAR20 Halogen

IC13N / TC13N with 3DBAF Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC13N 3DBAF W WHR

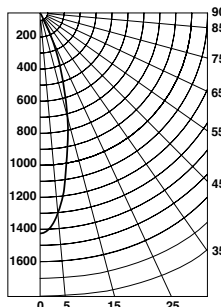
Test Number: PT12092901

Total Luminaire Efficiency: 71.7%

Luminaire Spacing Criteria: 0.5

Luminaire: White baffle trim. Open aperture.

Lamps: One 60PAR16/HAL/NFL30, rated at 650 total lumens.



Candlepower Distribution
(Candelas)

Angle	Candela	Lumens
0°	1437	
5°	1324	126
15°	725	205
25°	222	103
35°	21	13
45°	8	6
55°	6	5
65°	4	4
75°	3	3
85°	0	0

Initial Footcandles

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	39.9	18.0	3.2'
7'	29.3	13.2	3.8'
8'	22.4	10.1	4.3'
9'	17.7	8.0	4.9'
10'	14.4	6.5	5.4'
11'	11.9	5.3	5.9'
12'	10.0	4.5	6.5'
13'	8.5	3.8	7.0'
14'	7.3	3.3	7.6'
15'	6.4	2.9	8.1'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	33	29	27
5' x 5'	21	19	17
6' x 6'	14	13	12
7' x 7'	12	11	10
8' x 8'	9	8	8
9' x 9'	7	6	6
10' x 10'	5	5	4
12' x 12'	4	3	3

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	517	1770
55	482	1651
65	456	1561
75	491	1682
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	435	66.9	93.2
0-40°	448	68.9	96.1
0-60°	459	70.7	98.5
0-90°	466	71.7	100.0
90-180°	0	0.0	0.0
0-180°	466	71.7	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0			
	PW	70	50	30	10	0	PW	70	50	30	10	0	PW	70	50	30	10	0	
0	85	85	85	85	83	83	83	83	80	80	80	80	76	76	76	73	73	73	72
1	82	80	79	78	80	79	78	76	76	75	74	73	73	72	71	70	70	69	69
2	79	76	74	72	78	75	73	71	73	71	69	71	69	68	69	68	67	66	66
3	76	72	70	67	75	71	69	67	70	68	66	68	66	65	66	65	64	63	63
4	73	69	66	64	72	68	66	63	67	65	63	66	64	62	64	63	61	60	60
5	71	66	63	61	70	66	63	60	64	62	60	63	61	59	62	60	59	58	58
6	69	64	60	58	68	63	60	58	62	59	57	61	59	57	60	58	57	56	56
7	66	61	58	56	66	61	58	55	60	57	55	59	57	55	58	56	55	54	54
8	64	59	56	53	64	59	56	53	58	55	53	57	55	53	57	54	53	52	52
9	62	57	54	52	62	57	54	52	56	53	51	56	53	51	55	53	51	50	50
10	60	55	52	50	60	55	52	50	54	52	50	54	51	50	53	51	49	49	49

PHOTOMETRIC REPORT

Catalog Number: TC13N 3DBAF W WHR

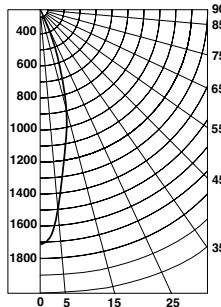
Test Number: PT01100401

Total Luminaire Efficiency: 68.6%

Luminaire Spacing Criteria: 0.51

Luminaire: White baffle trim. Open aperture.

Lamps: One 75PAR16/HAL/NFL30, rated at 900 total lumens.



Candlepower Distribution
(Candelas)

Angle	Candela	Lumens
0°	1702	
5°	1582	151
15°	889	252
25°	348	161
35°	43	27
45°	11	8
55°	9	8
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'	47.3	21.1	3.4'
7'	34.7	15.5	3.9'
8'	26.6	11.9	4.5'
9'	21.0	9.4	5.0'
10'	17.0	7.6	5.6'
11'	14.1	6.3	6.2'
12'	11.8	5.3	6.7'
13'	10.1	4.5	7.3'
14'	8.7	3.9	7.9'
15'	7.6	3.4	8.4'

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	43	39	35
5' x 5'	28	25	22
6' x 6'	19	17	16
7' x 7'	16	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

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	729	2496
55	712	2441
65	656	2246
75	731	2503
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	564	62.7	91.4
0-40°	591	65.7	95.7
0-60°	607	67.5	98.4
0-90°	617	68.6	100.0
90-180°	0	0.0	0.0
0-180°	617	68.6	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0			
	PW	70	50	30	10	0	PW	70	50	30	10	0	PW	70	50	30	10	0	
0	82	82	82	82	80	80	80	80	76	76	76	73	73	73	70	70	70	69	69
1	78	77	75	74	77	75	74	73	73	72	71	70	69	68	68	67	66	65	65
2	75	72	70	68	74	71	69	67	69	67	66	67	66	65	65	64	63	62	62
3	72	69	66	64	71	68	65	63	66	64	62	64	63	61	63	62	60	59	59
4	70	65	62	60	69	65	62	60	63	61	59	62	60	58	61	59	58	57	57
5	67	62	59	57	66	62	59	57	61	58	56	60	57	56	59	57	55	54	54
6	65	60	56	54	64	59	56	54	58	56	54	57	55	53	57	55	53	52	52
7	63	57	54	52	62	57	54	52	56	53	51	55	53	51	55	53	51	50	50
8	60	55	52	50	60	55	52	50	54	51	49	53	51	49	53	51	49	48	48
9	58	53	50	48	58	53	50	48	52	49	47	52	49	47	51	49	47	46	46
10	57	51	48	46	56	51	48	46	50	48	46	50	47	46	50	47	46	45	45

3" PAR16/PAR20 UNIVERSAL RECESSED DOWNLIGHT

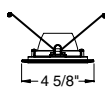
PAR16 or PAR20 Halogen

IC13N / TC13N with 3DBV Trim

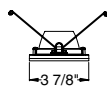
3DBV Downlight Bevel



Self-Flanged



Flangeless



PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC13N 3DBV BS WHSF

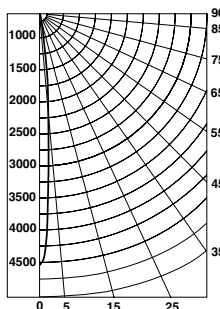
Test Number: PT12093003

Total Luminaire Efficiency: 55.5%

Luminaire Spacing Criteria: 0.16

Luminaire: 1 3/4" Regressed pinhole trim. Open aperture.

Lamps: One 60PAR16/HAL/NSP10, rated at 650 total lumens.



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	4538	
5°	2115	202
15°	445	126
25°	66	30
35°	4	2
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'	126.0	62.4	1.0'
7'	92.6	45.8	1.2'
8'	70.9	35.1	1.3'
9'	56.0	27.7	1.5'
10'	45.4	22.5	1.7'
11'	37.5	18.6	1.8'
12'	31.5	15.6	2.0'
13'	26.8	13.3	2.2'
14'	23.2	11.5	2.3'
15'	20.2	10.0	2.5'

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°	358	55.2	99.4
0-40°	361	55.5	100.0
0-60°	361	55.5	100.0
0-90°	361	55.5	100.0
90-180°	0	0.0	0.0
0-180°	361	55.5	100.0

AVERAGE INITIAL FOOTCANDLES

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

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	26	24	23
5' x 5'	16	15	15
6' x 6'	11	11	10
7' x 7'	9	9	8
8' x 8'	7	7	6
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	0					
0	66	66	66	66	65	65	65	65	62	62	62	59	59	59	57	57	57	55
1	64	63	62	61	63	62	61	60	60	59	59	58	57	57	56	56	55	54
2	63	61	59	58	61	60	59	58	58	57	56	57	56	55	55	55	54	53
3	61	59	57	56	60	58	57	55	57	56	55	56	55	54	54	54	53	52
4	60	57	55	54	59	57	55	54	55	54	53	55	53	52	54	53	52	51
5	58	56	54	52	58	55	53	52	54	53	52	54	52	51	53	52	51	50
6	57	54	52	51	56	54	52	51	53	52	51	53	52	50	52	51	50	49
7	56	53	51	50	55	53	51	50	52	51	50	52	50	49	51	50	49	49
8	55	52	50	49	54	52	50	49	51	50	49	51	49	48	50	49	48	48
9	54	51	49	48	54	51	49	48	50	49	48	50	49	48	50	48	48	47
10	53	50	48	47	53	50	48	47	50	48	47	49	48	47	49	48	47	46

PHOTOMETRIC REPORT

Catalog Number: TC13N 3DBV BS WHSF

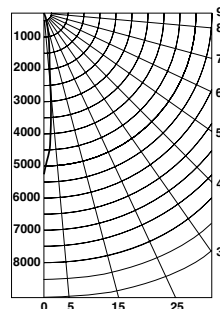
Test Number: PT01100501

Total Luminaire Efficiency: 63.5%

Luminaire Spacing Criteria: 0.22

Luminaire: 1 3/4" Regressed pinhole trim. Open aperture.

Lamps: One 75PAR16/CAP/NSP10, rated at 900 total lumens.



Candlepower Distribution (Candelas)

Angle	Candela	Lumens
0°	5200	
5°	2943	281
15°	660	187
25°	215	100
35°	7	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'	144.5	71.2	1.2'
7'	106.1	52.3	1.3'
8'	81.3	40.1	1.5'
9'	64.2	31.7	1.7'
10'	52.0	25.6	1.9'
11'	43.0	21.2	2.1'
12'	36.1	17.8	2.3'
13'	30.8	15.2	2.5'
14'	26.5	13.1	2.7'
15'	23.1	11.4	2.9'

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°	567	63.1	99.3
0-40°	572	63.5	100.0
0-60°	572	63.5	100.0
0-90°	572	63.5	100.0
90-180°	0	0.0	0.0
0-180°	572	63.5	100.0

AVERAGE INITIAL FOOTCANDLES

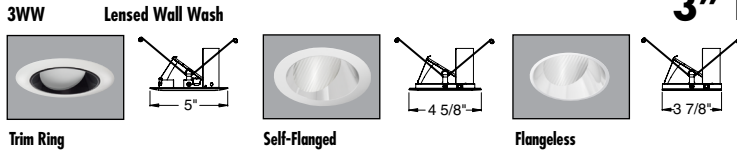
Reflectances: 80% Ceiling, 50% Walls, 20% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR3	RCR5
4' x 4'	41	38	35
5' x 5'	26	24	22
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'	6	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	0					
0	76	76	76	76	74	74	74	74	71	71	71	68	68	68	65	65	65	64
1	73	72	71	70	72	71	70	69	68	67	67	66	65	65	64	63	63	62
2	71	69	67	66	70	68	67	65	66	65	64	64	63	62	63	62	61	60
3	69	67	65	63	68	66	64	62	64	63	61	63	62	60	61	60	60	59
4	67	64	62	60	66	64	62	60	62	61	59	61	60	59	60	59	58	57
5	66	62	60	58	65	62	60	58	61	59	58	60	58	57	59	58	57	56
6	64	61	58	57	63	60	58	56	59	58	56	59	57	56	58	57	55	55
7	63	59	57	55	62	59	57	55	58	56	55	57	56	54	57	55	54	54
8	61	58	55	54	61	57	55	54	57	55	53	56	54	53	56	54	53	52
9	60	56	54	52	59	56	54	52	56	54	52	55	53	52	55	53	52	51
10	59	55	53	51	58	55	53	51	54	52	51	54	52	51	54	52	51	50



3" PAR16/PAR20 UNIVERSAL RECESSED LENSED WALL WASH

PAR16 or PAR20 Halogen
IC13N / TC13N with 3WW Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

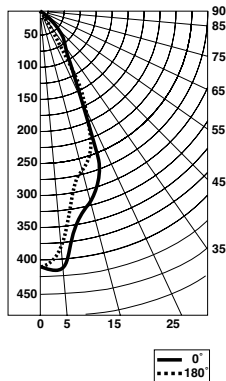
Catalog Number: IC13N 3WW CS WHR
Test Number: PT12093001
Total Luminaire Efficiency: 49.1%
Luminaire Spacing Criteria: 0.68
Luminaire: Clear Alzak® finish, lensed wall wash.
Lamps: One 50PAR20/HAL/NFL30/RP

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	961	3294
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	188	34.1	69.5
0-40°	228	41.5	84.5
0-60°	263	47.8	97.4
0-90°	270	49.1	100.0
90-180°	0	0	0
0-180°	270	49.1	100.0



Candlepower Distribution (Candelas)

Degrees Vertical	0° Wall Wash	180° Downlight
0°	407	407
5°	404	358
15°	315	238
25°	182	106
35°	84	51
45°	55	14
55°	26	0
65°	16	0
75°	7	0
85°	0	0

Footcandles on Wall from Multiple Fixtures

Fixture Distance to Wall	18"						24"					
	18"		24"		18"		24"					
1'	9	8	9	8	6	8	5	4	4	4	3	4
2'	12	11	12	10	8	10	9	9	9	7	7	7
3'	11	11	11	9	8	9	9	9	9	7	6	7
4'	10	10	10	8	8	8	8	9	8	6	6	6
5'	8	8	8	6	6	6	8	8	8	6	6	6
6'	6	6	6	5	5	5	7	7	7	5	5	5
7'	5	5	5	4	4	4	6	6	6	4	4	4
8'	4	4	4	3	3	3	5	5	5	4	4	4
9'	3	3	3	3	3	3	4	4	4	3	3	3

*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

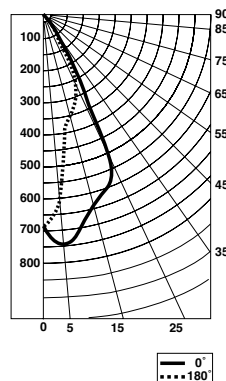
Catalog Number: TC13N 3WW CS WHR
Test Number: PT01100407
Total Luminaire Efficiency: 51.6%
Luminaire Spacing Criteria: 0.47
Luminaire: Clear Alzak® finish, lensed wall wash.
Lamps: One 75PAR16/HAL/NFL30

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	1401	4802
55	0	0
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	328	36.5	70.6
0-40°	400	44.4	86.1
0-60°	454	50.4	97.7
0-90°	465	51.6	100.0
90-180°	0	0	0
0-180°	465	51.6	100.0



Candlepower Distribution (Candelas)

Degrees Vertical	0° Wall Wash	180° Downlight
0°	667	667
5°	732	571
15°	633	317
25°	399	160
35°	169	72
45°	98	21
55°	46	0
65°	24	0
75°	11	0
85°	1	0

Footcandles on Wall from Multiple Fixtures

Fixture Distance to Wall	18"						24"					
	18"		24"		18"		24"					
1'	16	14	16	13	9	13	8	7	8	7	5	7
2'	22	20	22	18	15	18	15	15	15	12	11	12
3'	24	24	24	19	16	19	17	16	17	13	12	13
4'	21	21	21	16	16	16	18	18	18	13	14	13
5'	16	16	16	12	12	12	17	16	17	12	13	12
6'	12	12	12	9	9	9	14	14	14	11	11	11
7'	9	10	9	7	7	7	12	12	12	8	9	8
8'	7	8	7	6	6	6	9	9	9	7	7	7
9'	6	6	6	5	5	5	8	8	8	6	6	6

*Multipliers: Black - 0.7, Diffuse - 0.95

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