

PRODUCT SPECIFICATIONS

Cutoff 45° visual cutoff to lamp and lamp image
Trims Style Die Cast Self Flanged and Flangeless reflectors utilize precision wound double torsion springs for tight, secure fit to ceiling • Flange is same finish as reflector unless optional painted white flange is specified
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, 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.
Codes/Labels UL and cUL listed for through-branch wiring, damp locations (wet location with approved trims) • IC13SQ rated for direct contact with insulation • Meets energy code Air Leakage requirements per ASTM E283 • Product thermally protected • Union made.

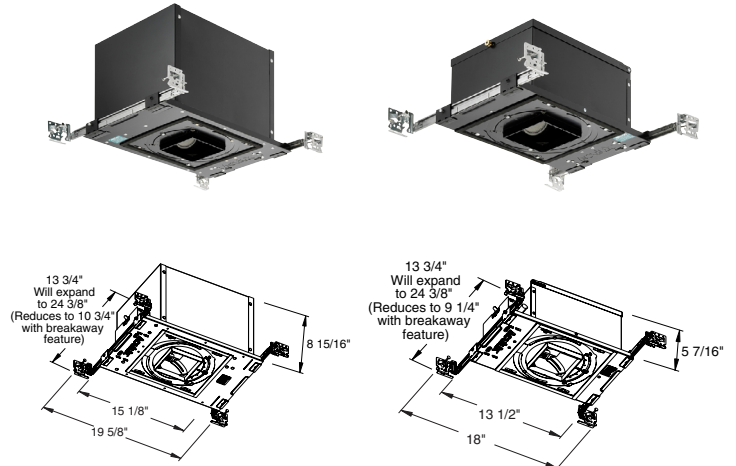
Patented (US Patent 8,038,113) Pro-VI™ Bar Hanger System With locking set screws, permits quick placement of housing within 24" O.C. joists or suspended ceilings • Robust bar eliminates flexing regardless of fixture position • Integral T-bar notch with locking tabs secures housing to suspended ceiling 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 IC13SQ rated for 4 No. 12 AWG 90° C through branch circuit conductors • TC13SQ rated for 8 No. 12 AWG 90° C through branch circuit conductors • Includes (5) ½", (1) ¾", 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 +/- ½" translation and +/- 45° aperture rotation aids fixture alignment after installation, prior to drywall.
Ceiling Thickness ½" – 2" ceiling

Specifications 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
IC13SQ / TC13SQ



IC13SQ

TC13SQ

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

ORDERING INFORMATION

Example: IC13SQ 3ABV BS WHFM FMA3/087

HOUSING INFO

Series / Housing Style	Option
IC13SQ 3" Aculux Square PAR16/PAR20 IC Air Tight	CP ¹ Chicago Plenum
TC13SQ 3" Aculux Square PAR16/PAR20 Non-IC	

TRIM OPTIONS

Square Trim Style	Reflector Finish	Flange Style / Finish	Environment	Ceiling Installation
ADJUSTABLE ACCENT	BD³ Black Diffuse	SELF-FLANGED	WET⁶ Wet location	SELF-FLANGED
3SQA Angle-Cut Reflector	CD³ Clear Diffuse	SF³ Flange is same finish as reflector		— Ceiling ≤ .875"
3SQABV Adjustable Bevel	W³ White Paint	WHSF White painted flange		CTA3SQ/125 Ceiling 0.875" - 1.25"
3SQAPIN Pinhole, 1 ¼"	WTD³ Wheat Diffuse	BLSF² Black painted flange		CTA3SQ/163 Ceiling 1.25" - 1.625"
DOWNLIGHT	BS² Black Specular	FLANGELESS⁵		CTA3SQ/200 Ceiling 1.625" - 2.00"
3SQD Deep Reflector		FM³ Flangeless		FLANGELESS, GYPSUM
3SQDBV Downlight Bevel		WHFM² Flangeless, White trim		FMA3SQ/087 Ceiling ≤ .875"
3SQDPIN Pinhole, 1 ¼"		BLFM² Flangeless, Black trim		FMA3SQ/125 Ceiling 0.875" - 1.25"
WALL WASH				FMA3SQ/163 Ceiling 1.25" - 1.625"
3SQWW Lensed Wall Wash				FLANGELESS, WOOD/STONE/TILE⁴
				SFM3SQ/100 (B,W) Ceiling ≤ 1.00"
				SFM3SQ/138 (B,W) Ceiling 1.00" - 1.375"
				SFM3SQ/163 (B,W) Ceiling 1.375" - 1.625"

NOTES

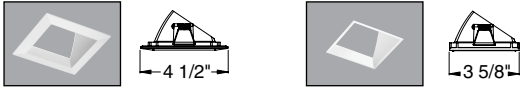













Ordering Notes
¹ CP available on TC13SQ only
² Available on 3SQABV, 3SQAPIN, 3SQDBV, 3SQDPIN only
³ Available for 3SQA, 3SQD, 3SQWW only
⁴ Specify finish : B=Black, W=White
⁵ Must specify flangeless ceiling installation (FMA3SQ or SFM3SQ)
⁶ Not available with 3SQWW

3" PAR16/PA20 UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH

PAR16 or PAR20 Halogen

IC13SQ / TC13SQ

TRIM SELECTION

ADJUSTABLE ACCENT					MAX. LAMP RATING	
35QA Angle Cut Reflector  Self-Flanged Flangeless	Aperture: 3 1/4"	 *	IC13SQ : 60W PAR16 / 50W PAR20 IC13SQ (WET): 45W PAR16 / 50W PAR20 TC13SQ : 75W PAR16 / 50W PAR20 TC13SQ (WET): 60W PAR16 / 50W PAR20			
35QABV Adjustable Bevel  Self-Flanged Flangeless	Aperture: 1 3/4"	 *	IC13SQ : 45W PAR16 / 50W PAR20 TC13SQ : 60W PAR16 / 50W PAR20			
35QAPIN Adjustable Pinhole, 1 1/4"  Self-Flanged Flangeless	Aperture: 1 1/4"	 *	IC13SQ : 60W PAR16 / 50W PAR20 IC13SQ (WET): 45W PAR16 / 50W PAR20 TC13SQ : 75W PAR16 / 50W PAR20 TC13SQ (WET): 60W PAR16 / 50W PAR20			
DOWNLIGHT TRIMS						
35QD Downlight Reflector  Self-Flanged Flangeless	Aperture: 3 1/4"	 *	IC13SQ : 60W PAR16 / 50W PAR20 IC13SQ (WET): 45W PAR16 / 50W PAR20 TC13SQ : 75W PAR16 / 50W PAR20 TC13SQ (WET): 60W PAR16 / 50W PAR20			
35QDBV Downlight Bevel  Self-Flanged Flangeless	Aperture: 1 3/4"	 *	IC13SQ : 45W PAR16 / 50W PAR20 TC13SQ : 60W PAR16 / 50W PAR20			
35QDPIN Downlight Pinhole, 1 1/4"  Self-Flanged Flangeless	Aperture: 1 1/4"	 *	IC13SQ : 60W PAR16 / 50W PAR20 IC13SQ (WET): 45W PAR16 / 50W PAR20 TC13SQ : 75W PAR16 / 50W PAR20 TC13SQ (WET): 60W PAR16 / 50W PAR20			
WALL WASH						
35QWW Lensed Wall Wash  Self-Flanged Flangeless	Aperture: 3 1/4"	 *	IC13SQ : 45W PAR16 / 50W PAR20 TC13SQ : 60W PAR16 / 50W PAR20			

* With WET option

**3" PAR16/PA20 UNIVERSAL RECESSED
ADJUSTABLE/DOWNLIGHT/WALL WASH**

PAR16 or PAR20 Halogen

IC13SQ / TC13SQ

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.

3" PAR16/PA20 UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH

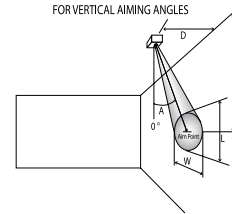
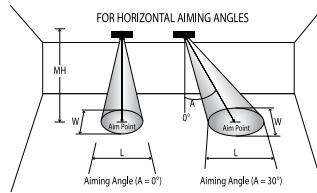
PAR16 or PAR20 Halogen

IC13SQ / TC13SQ

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
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
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
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

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."

3SQD Downlight Reflector

Aperture: 3 1/4"



Self-Flanged



Flangeless

3" PAR16/PA20 UNIVERSAL RECESSED DOWNLIGHT

PAR16 or PAR20 Halogen

IC13SQ / TC13SQ with 3SQD Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC13SQ 3SQD CD SF

Test Number: PT02100301

Total Luminaire Efficiency: 73.2%

Luminaire Spacing Criteria: 0.5

Luminaire: Diffuse finish, square open downlight trim.

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

Initial Footcandles

Table with 4 columns: Distance to Illuminated Plane (Feet), Footcandles Beam Center, Footcandles Beam Edge, Beam Diameter. Rows range from 6' to 15'.

AVERAGE INITIAL FOOTCANDLES

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

Table with 4 columns: Luminaire Spacing, Room Cavity Ratio (RCR1, RCR3, RCR5). Rows list various spacing dimensions.

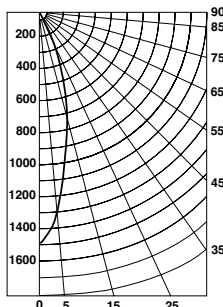
Luminance Data

Table with 3 columns: Ang in Deg, Footlamberts, Candela/M². Rows range from 45 to 85 degrees.

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

Large table for Coefficients of Utilization with columns for PCC, PW, and various spacing dimensions.



Candlepower Distribution

Table with 3 columns: Angle, Candela, Lumens. Rows range from 0 to 85 degrees.

Zonal Lumen Summary

Table with 4 columns: Zone, Lumens, %Lamp, %Fixture. Rows range from 0-30 to 0-180 degrees.

PHOTOMETRIC REPORT

Catalog Number: TC13SQ 3SQD CD SF

Test Number: PT02100404

Total Luminaire Efficiency: 71.5%

Luminaire Spacing Criteria: 0.54

Luminaire: Diffuse finish, square downlight trim. Open aperture.

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

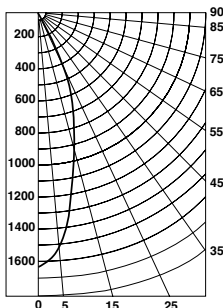
Initial Footcandles

Table with 4 columns: Distance to Illuminated Plane (Feet), Footcandles Beam Center, Footcandles Beam Edge, Beam Diameter. Rows range from 6' to 15'.

AVERAGE INITIAL FOOTCANDLES

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

Table with 4 columns: Luminaire Spacing, Room Cavity Ratio (RCR1, RCR3, RCR5). Rows list various spacing dimensions.



Candlepower Distribution

Table with 3 columns: Angle, Candela, Lumens. Rows range from 0 to 85 degrees.

Luminance Data

Table with 3 columns: Ang in Deg, Footlamberts, Candela/M². Rows range from 45 to 85 degrees.

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

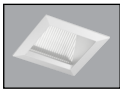
Effective Floor Reflectance 20%

Large table for Coefficients of Utilization with columns for PCC, PW, and various spacing dimensions.

Zonal Lumen Summary

Table with 4 columns: Zone, Lumens, %Lamp, %Fixture. Rows range from 0-30 to 0-180 degrees.

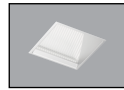
3SQWW Lensed Wall Wash



Self-Flanged



Aperture: 3 1/4"



Flangeless



3" PAR16/PA20 UNIVERSAL RECESSED DOWNLIGHT

PAR16 or PAR20 Halogen

IC13SQ / TC13SQ with 3SQWW Trim

PHOTOMETRICS

PHOTOMETRIC REPORT

Catalog Number: IC13SQ 3SQWW CD SF

Test Number: PTO21003003

Total Luminaire Efficiency: 55.9%

Luminaire Spacing Criteria: .58

Luminaire: Haze finish, lensed wall wash.

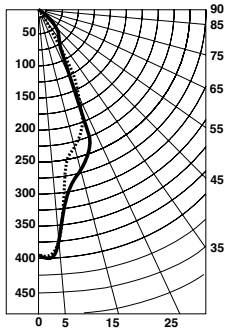
Lamps: One 45PAR16/FL27

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	1264	4332
55	311	1064
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	165	39.4	70.4
0-40°	199	47.3	84.6
0-60°	230	54.8	97.9
0-90°	235	55.9	100
90-180°	0	0	0
0-180°	235	55.9	100



Candlepower Distribution

(Candelas)

Degrees Vertical	0° Wall Wash	180° Downlight
0°	384	384
5°	350	374
15°	228	200
25°	123	128
35°	73	42
45°	54	21
55°	27	4
65°	14	0
75°	7	0
85°	0	0

Footcandles on Wall from Multiple Fixtures

Fixture Distance to Wall	18"						24"					
	18"		24"		18"		24"					
Fixture Centers (spacing)	18"	24"	18"	24"	18"	24"	18"	24"	18"	24"		
1'	8	7	8	7	4	7	4	4	4	4	4	
2'	11	10	11	8	7	8	8	8	8	6	6	
3'	8	8	8	6	6	6	7	7	7	5	5	
4'	8	7	8	6	6	6	6	6	6	4	5	
5'	6	6	6	4	4	4	6	6	6	4	4	
6'	4	5	4	3	3	4	5	5	5	4	4	
7'	3	4	3	3	3	3	4	4	4	3	3	
8'	3	3	3	2	2	2	3	3	3	3	3	
9'	3	3	3	2	2	2	3	3	3	2	2	

*Multipliers: Gold - 0.9, Black - 0.7, Haze - 0.95

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

PHOTOMETRIC REPORT

Catalog Number: TC13SQ 3SQWW CD SF

Test Number: PTO2100502

Total Luminaire Efficiency: 58.4%

Luminaire Spacing Criteria: 0.82

Luminaire: Haze finish, lensed wall wash.

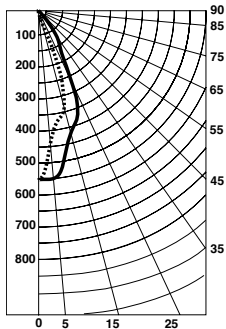
Lamps: One 60PAR16/HAL/NFL30

Luminance Data

Ang in Deg	Footlamberts	Candela/M ²
45	1778	6093
55	391	1341
65	0	0
75	0	0
85	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30°	263	40.4	69.3
0-40°	321	49.4	84.7
0-60°	371	57.0	97.7
0-90°	379	58.4	100.0
90-180°	0	0	0
0-180°	379	58.4	100.0



Candlepower Distribution

(Candelas)

Degrees Vertical	0° Wall Wash	180° Downlight
0°	520	520
5°	538	446
15°	404	315
25°	298	150
35°	117	75
45°	84	29
55°	44	5
65°	20	0
75°	11	0
85°	0	0

Footcandles on Wall from Multiple Fixtures

Fixture Distance to Wall	18"						24"					
	18"		24"		18"		24"					
Fixture Centers (spacing)	18"	24"	18"	24"	18"	24"	18"	24"	18"	24"		
1'	14	11	14	12	6	12	6	6	6	5	4	
2'	17	16	17	13	12	13	13	12	13	10	9	
3'	18	17	18	14	12	14	12	13	12	10	9	
4'	15	15	15	11	11	11	13	13	13	10	10	
5'	11	12	11	8	9	8	12	12	12	9	9	
6'	9	9	9	6	7	6	10	10	10	8	8	
7'	7	7	7	5	5	5	8	8	8	6	6	
8'	6	6	6	4	4	4	7	7	7	5	5	
9'	5	5	5	4	4	4	6	6	6	4	4	

*Multipliers: Gold - 0.9, Black - 0.7, Haze - 0.95

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