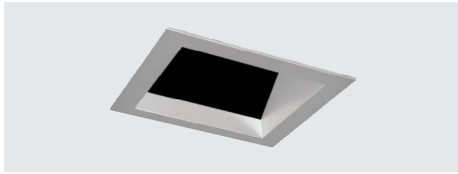




TRIM STYLES



Angle-Cut Reflector



Bevel

FEATURES

SPOT ON! OPTICS

- Field Interchangeable TIR Optics in 9 distributions
- Accommodates up to 2 beam control lenses or filters

ACU-AIM™ PRECISION AIMING

- Precision geared hot-aiming provides 370° horizontal, 45° vertical aiming
- Optimized center beam optics translates center of the beam through the center of the aperture resulting in low aperture brightness

TRU-LINE™ PRECISION INSTALLATION

- Patented aperture translation featuring +/- 1/2" translation and +/- 45° aperture rotation ensures perfect fixture to fixture alignment (US Patent 8,277,090)
- Robust Pro-VI™ bar hangers provide robust, non-binding action. (US Patent 8,038,113)

EXCEPTIONAL PERFORMANCE FROM 4-INCH APERTURE

- Up to 3298 lumens, 30,000 CBCP Delivered!
- Exceptionally consistent color with < 2SDCM
- Excellent color rendition with 95+ CRI | 90+ R9 Available



A Dimension:  
Self Flanged: 5.7"  
Flangeless: 4.9"

PERFORMANCE

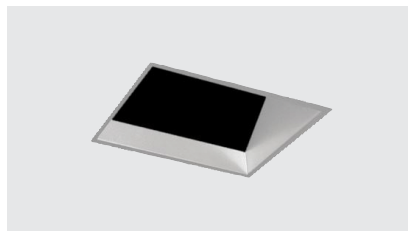
LUMEN PACKAGE	WATTS IN	DELIVERED LUMENS	EFFICACY (LPW)	MCBCP (12° BEAM)
12LM	9	1286	142	11359
17LM	13	1649	126	14563
22LM	19	2242	118	19806
27LM	25	2770	110	24466
32LM	33	3298	99	29127

Performance with 4SQA trim at 3000K | 80CRI  
Actual performance may differ as a result of end-user environment and application.  
All values are design or typical values, measured under laboratory conditions at 25°C

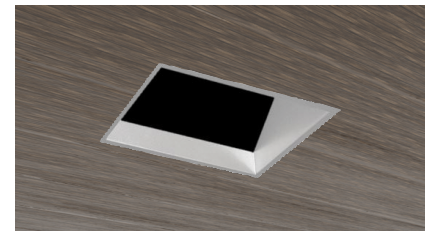
FLANGE STYLES



Self-Flanged



Flangeless (Gypsum)



Flangeless (Wood | Stone | Tile)



ORDERING INFORMATION

EXAMPLE: AX4SQ A 27LM 30K 95CRI 24D FPC 120 ICAT 4SQABV BD WHSF

Housing Style	Lumens	CCT	CRI	Beam	Driver	Voltage <sup>3</sup>	Ratings	Options
AX4SQ A New Construction Adjustable	12LM 1200 lumens	27K 2700K	80CRI	12D 12° beam	GZ1 0-10V   1% min	120	(blank) Non-ICAT	NLIGHT <sup>4</sup> nLight Dimming
	17LM 1700 lumens	30K 3000K	90CRI	20D 20° beam	EZ1 eldoLED 0-10V   linear 1% min	277	CP Chicago Plenum	
	22LM 2200 lumens	35K <sup>2</sup> 3500K	95CRI	24D 24° beam	EZB eldoLED 0-10V   log <1% min	MVOLT (120-277)	ICAT IC Rated, Air-tight	
	27LM 2700 lumens	40K <sup>2</sup> 4000K		30D 30° beam	FPC Phase Cut Dimming   1%			
	32LM <sup>1</sup> 3200 lumens		40D 40° beam	45D 45° beam	ECOD Lutron EcoSystem   1% min			
			50D 50° beam	50D20D 50° x 20°	EDXB eldoLED DMX   square <1% min			
				EDAB eldoLED DALI   log <1% min				

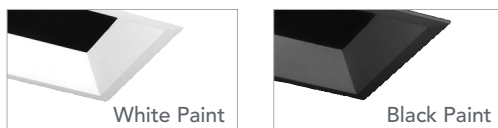
Trim	Reflector Finish	Flange Style	Trim Lens   Environment
<b>Adjustable Reflector</b> 45QA Angle Cut Reflector (0-45°)	W White Paint CD Clear Diffuse BD Black Diffuse WTD Wheat Diffuse	<b>Flanged</b> SF Self Flanged WHSF Self Flanged, White Painted Flange (not available with W finish) <b>Flangeless<sup>5</sup></b> FM Flangeless	(blank) Open   Damp Location WET <sup>6</sup> Solite   Wet Location
45QAC20 Shallow Cut Reflector (0-20°)			
<b>Bevel</b> 45QABV BD Bevel Adjustable (0-45°)	<b>Bevel Finish &amp; Flange Style</b> <b>Flanged</b> WHSF White, Flanged BLSF Black, Flanged <b>Flangeless<sup>5</sup></b> WHFM White, Flangeless BLFM Black, Flangeless		(blank) Open   Damp WET Solite   Wet Location

Ceiling Installation	
<b>Flanged</b>	
(blank)	Ceiling Thickness < 0.875"
CTA45SQ/125	Ceiling Thickness 0.875" - 1.25"
CTA45SQ/163	Ceiling Thickness 1.25" - 1.625"
CTA45SQ/200	Ceiling Thickness 1.625" - 2"
<b>Flangeless (Gypsum)</b>	
FMA45SQ/087	Ceiling Thickness < 0.875"
FMA45SQ/125	Ceiling Thickness 0.875" - 1.25"
FMA45SQ/163	Ceiling Thickness 1.25" - 1.625"
FMA45SQ/200	Ceiling Thickness 1.625" - 2"
<b>Flangeless (Wood   Stone   Tile)<sup>7</sup></b>	
SFM45SQ/087 (B,W)	Ceiling Thickness < 0.875"
SFM45SQ/125 (B,W)	Ceiling Thickness 0.875" - 1.25"
SFM45SQ/163 (B,W)	Ceiling Thickness 1.25" - 1.625"

REFLECTOR FINISHES

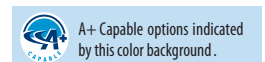


BEVEL FINISHES



ORDERING NOTES

- 32LM not available with ICAT and CP.
- 35K available in 80CRI and 90CRI only. 40K available in 80CRI only. Contact factory for other CCT/CRI combinations.
- MVOLT standard on GZ1, EZ1, EZB, ECOD, EDXB, EDAB (unless NLIGHT). Must be 120 for FPC or ECOS2.
- Must specify 120 or 277 volts. NLIGHT only available with EZ1 or EZB.
- Must specify FMA45SQ or SFM45SQ option.
- WET not available with 45QAC20.
- Specify finish: B = Black, W = White.





PRODUCT SPECIFICATIONS

FIELD INTERCHANGEABLE LED LIGHT ENGINE

- <2SDCM Binning
- 2700K | 3000K | 3500K | 4000K CCT
- 80+ CRI available for all CCTs
- 90+ CRI available for 2700K, 3000K, 3500K
- 95+ CRI (>90 R9) available for 2700K & 3000K
- Future proof and easy to maintain - serviceable from below the ceiling

SPOT-ON! PRECISION OPTICS

- Field Interchangeable TIR Optics from 12° FWHM to 50° FWHM provide smooth, striation-free beams
- Patented self-adjusting optic holder accommodates up to 2 beam control lenses or filters (US Patent 8,950,911)

ACU-AIM™ PRECISION AIMING

- Precision Geared hot-aiming via Phillips screwdriver
- 370° horizontal, 45° vertical aiming
- Optimized center beam optics translates center of the beam through the center of the aperture resulting in maximum efficiency and low aperture brightness
- Numeric indicator marks allow contractor to pre-aim fixtures

HIGH QUALITY TRIMS

- Available with die cast aluminum bevels and reflectors.
- Available in Self Flanged and Flangeless
- Must Specify FMA4SQ for gypsum flangeless installation
- Must specify SFM4SQ for wood, stone, tile flangeless installation

FIELD REPLACEABLE DRIVER

- Accommodates 120-277V input and multiple control protocols
- Dims without perceived flicker to <1% depending on driver specified
- Field replaceable without tools from below the ceiling
- >0.9 Power Factor

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/resources/buy-american](http://www.acuitybrands.com/resources/buy-american) for additional information.

WARRANTY & RATED LIFE

- LED is rated for >50,000 hours at 70% lumen maintenance
- 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

NEW CONSTRUCTION MOUNTING

- Features patented (US Patent 8,038,113) Pro-VI™ bar hanger system offering compatible with wood stud and T-bar
- All fixtures also feature vertically adjustable mounting brackets (butterfly brackets)
- Centerline indicators on plaster frame and patented (US Patent 8,277,090) Tru-Line™ Platform featuring +/- 1/2" translation and +/- 45° aperture rotation aids fixture alignment after installation, prior to finishing the ceiling.

JUNCTION BOX

- Rated for (4) No. 12 AWG 90°C through branch circuit conductors.
- Includes (6) 1/2", (1) 3/4", (4) Non-metallic sheathed cable knock-outs.
- Push-in electrical connectors for field connections.

CODES & LABELS

- UL & cUL listed for through branch wiring, damp location
- Meets energy code Air Leakage requirements per ASTM E283
- ENERGY STAR® certified with select trims and housings
- Can be used to comply with Title 24, Part 6 with select trims and housings. Reference T24 JA-8 database for list of compliant housings and trims.
- ICAT housings are rated for direct contact with insulation
- Low density spray foam insulation compatible: ICAT housings (excluding ECOS2, ECOD, EDXB, NLIGHT) are compatible with foam insulation with an R-Value of 4.3 per inch or less.
- Union made

CEILING THICKNESS

- Accommodates 1/2" to 2" ceiling thickness

A+ CAPABLE LUMINAIRE

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background on ordering information\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

Spot On! Precision Optics



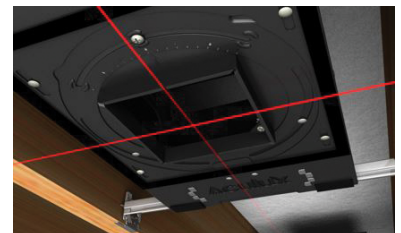
Smooth, striation-free beams with field-interchangeable TIR optics from 12° to 50°

Acu-Aim™ Precision Aiming



Precision geared hot-aiming is effortless. Centerbeam optics results in lower aperture brightness

Tru-Line™ Precision Installation



Pro-VI™ bar hangers, coupled with +/-1/2" aperture translation and +/-45° aperture rotation makes perfect installation achievable

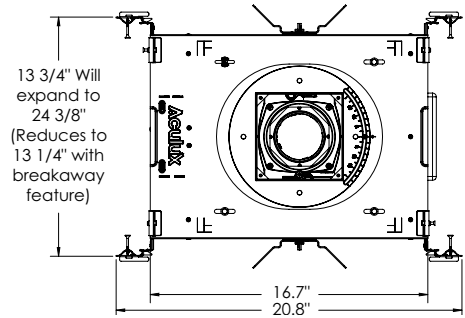
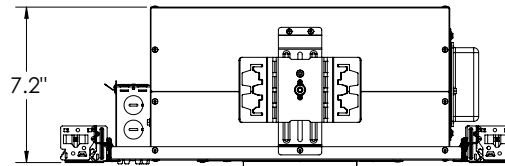
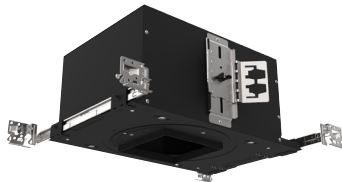
DIMENSIONS

New Construction Adjustable (AX4SQ A)

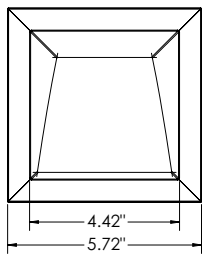
ICAT/Non-ICAT: 12LM | 17LM | 22LM | 27LM

Non-ICAT: 32LM

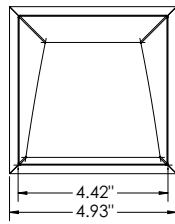
Ceiling Cutout: 5-5/16" x 5-5/16" (refer to installation instructions for flangeless ceiling cutout)



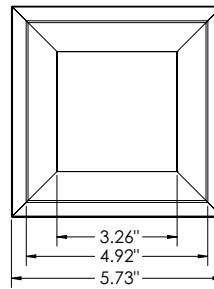
Reflector Trim (4SQA & 4SQAC20)



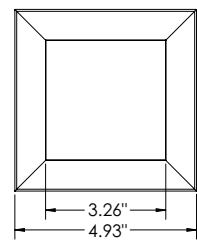
Flanged



Flangeless



Flanged



Flangeless

Bevel Trim (4SQABV)

ELECTRICAL SPECIFICATIONS

LUMEN PACKAGE	12LM		17LM		22LM		27LM		32LM	
Voltage	120	277	120	277	120	277	120	277	120	277
Input Watts	9.5	10	13.7	14.7	19.5	20.4	25.8	26.4	33.4	33.6
Input Current	0.08	0.04	0.11	0.06	0.16	0.08	0.22	0.1	0.28	0.13
Frequency	50   60 Hz		50   60 Hz		50   60 Hz		50   60 Hz		50   60 Hz	
Power Factor	0.9		0.9		0.9		0.9		0.9	

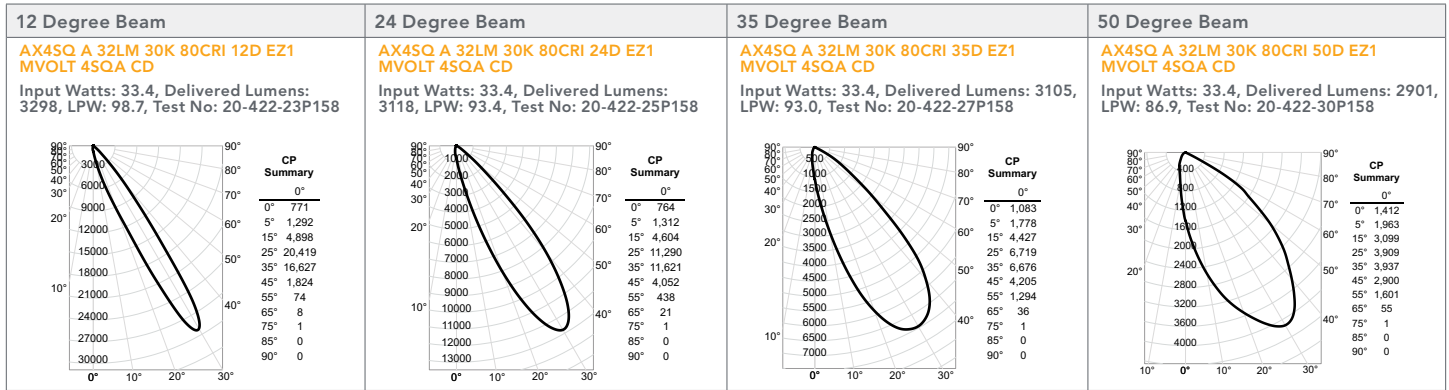
ACCESSORIES

Beam Control Lenses & Filters		Replacement Optics		Optional Installation Accessories	
<b>Beam Control Lenses</b>		<b>UV Filter &amp; Color Correction</b>		<b>Bar Hangers</b>	
DIFF 300	Diffuse Spread lens	UVF 300	UV Filter Lens	HB1	Juno Real Nail® 3 Bar Hangers
SOLITE 300	Solite Uniformity Lens	DCCF 300 HAL4250	Daylight Blue Correction	HB26	26" C-Channel Bar Hangers
PRISM 300	Prismatic Lens			HB50	50" C-Channel Bar Hangers
LSPREAD 300	Linear Spread Lens			LB27	27" Linear Bar Hangers
HCLBL 300	Hexcell Louver			<i>Note: Fixture supplied with Pro-VI™ Bar Hangers</i>	
		4AXOPT/12D	12° Beam	<b>Emergency Inverter</b>	
		4AXOPT/20D	20° Beam	IIS 35 HE	Up to 35W Remote Mount Micro Inverter (32LM Excluded)
		4AXOPT/24D	24° Beam		
		4AXOPT/30D	30° Beam		
		4AXOPT/35D	35° Beam		
		4AXOPT/40D	40° Beam		
		4AXOPT/45D	45° Beam		
		4AXOPT/50D	50° Beam		
		4AXOPT/50D20D	50° x 20° Beam		



PHOTOMETRICS - 4SQA

Tested in accordance to IESNA LM79



Measured 32LM   30K   80 CRI	Beam Spread	CBCP	FOR HORIZONTAL AIMING ANGLES						FOR VERTICAL AIMING ANGLES									
			Horizontal Aiming Angles			Horizontal Aiming Angles			Vertical Aiming Angles				Vertical Aiming Angles					
			0°			30°			30°				45°					
MH	FC	L	W	FC	L	W	D	FC	X	L	W	FC	X	L	W			
12D	29127	6	809	1.3	1.3	526	1.8	1.6	3	405	5.2	2.8	1.3	1144	3.0	1.4	1.0	
			8	455	1.8	1.8	296	2.4	2.1	4	228	6.9	3.7	1.8	644	4.0	1.8	1.3
			10	291	2.2	2.2	189	3.0	2.6	5	146	8.7	4.7	2.2	412	5.0	2.3	1.6
			12	202	2.7	2.7	131	3.6	3.1	6	101	10.4	5.6	2.7	286	6.0	2.7	1.9
			14	149	3.1	3.1	97	4.2	3.6	7	74	12.1	6.5	3.1	210	7.0	3.2	2.2
24D	12766	4	798	1.7	1.7	518	2.4	2.0	2	399	3.5	4.1	1.7	1128	2.0	1.8	1.2	
			6	355	2.6	2.6	230	3.5	3.0	3	177	5.2	6.1	2.6	501	3.0	2.7	1.9
			8	199	3.5	3.5	130	4.7	4.0	4	100	6.9	8.1	3.5	282	4.0	3.7	2.5
			10	128	4.4	4.4	83	5.9	5.0	5	64	8.7	10.2	4.4	181	5.0	4.6	3.1
			12	89	5.2	5.2	58	7.1	6.0	6	44	10.4	12.2	5.2	125	6.0	5.5	3.7
35D	6946	4	434	2.5	2.5	282	3.5	2.9	2	217	3.5	7.1	2.5	614	2.0	2.8	1.8	
			6	193	3.8	3.8	125	5.2	4.3	3	96	5.2	10.7	3.8	273	3.0	4.2	2.7
			8	109	5.0	5.0	70	6.9	5.8	4	54	6.9	14.2	5.0	153	4.0	5.6	3.5
			10	69	6.3	6.3	45	8.6	7.2	5	35	8.7	17.8	6.3	98	5.0	7.0	4.4
			12	48	7.5	7.5	31	10.4	8.7	6	24	10.4	21.3	7.5	68	6.0	8.3	5.3
50D	4133	4	258	3.4	3.4	168	4.8	3.9	2	129	3.5	14.3	3.4	365	2.0	4.1	2.4	
			6	115	5.0	5.0	75	7.1	5.8	3	57	5.2	21.5	5.0	162	3.0	6.1	3.6
			8	65	6.7	6.7	42	9.5	7.8	4	32	6.9	28.6	6.7	91	4.0	8.2	4.8
			10	41	8.4	8.4	27	11.9	9.7	5	21	8.7	35.8	8.4	58	5.0	10.2	5.9
			12	29	10.1	10.1	19	14.3	11.6	6	14	10.4	42.9	10.1	41	6.0	12.3	7.1

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°).

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

LUMEN | CBCP MULTIPLIERS

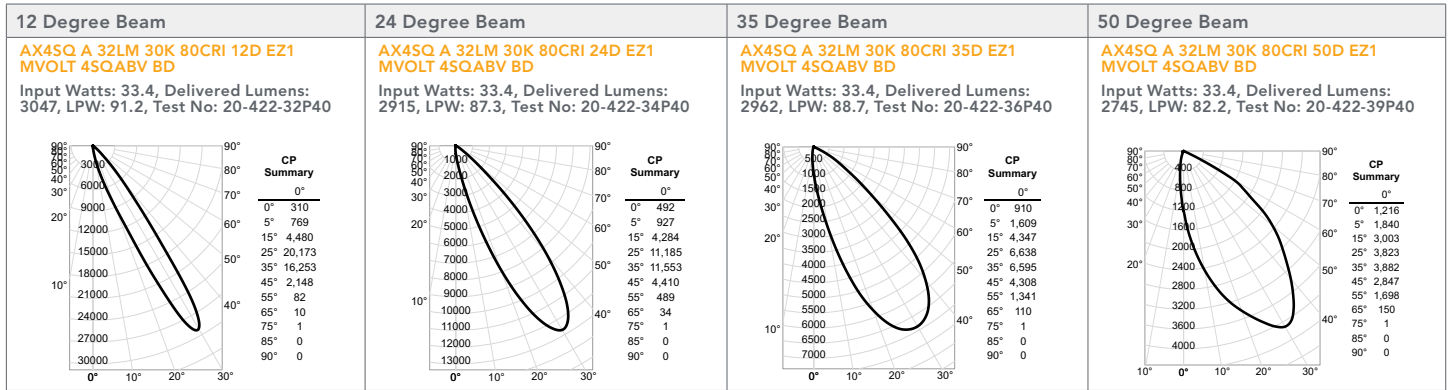
CCT	80+ CRI	90+ CRI	95+ CRI	12LM	17LM	22LM	27LM	32LM
2700K	0.95	0.83	0.68	0.39	0.50	0.68	0.84	1.0
3000K	1.00	0.87	0.73					
3500K	1.02	0.89	-					
4000K	1.04	-	-					

\*Refer to website for additional photometry (alternate trims, CCT/CRI, lumen packages)



PHOTOMETRICS - 4SQABV

Tested in accordance to IESNA LM79



Measured 06C   30K   80 CRI	Horizontal Aiming Angles								Vertical Aiming Angles								
	0°				30°				30°				45°				
	Beam Spread	CBCP	MH	FC	L	W	FC	L	W	D	FC	X	L	W	FC	X	L
12D	29071	6	808	1.3	1.3	525	1.8	1.5	3	404	5.2	2.8	1.3	1142	3.0	1.3	0.9
24D	12675	4	792	1.7	1.7	515	2.4	2.0	2	396	3.5	4.1	1.7	1120	2.0	1.8	1.2
35D	6867	4	429	2.5	2.5	279	3.5	2.9	2	215	3.5	7.2	2.5	607	2.0	2.8	1.8
50D	4102	4	256	3.4	3.4	167	4.8	3.9	2	128	3.5	14.5	3.4	363	2.0	4.1	2.4

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°).

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

LUMEN | CBCP MULTIPLIERS

CCT	80+ CRI	90+ CRI	95+ CRI	12LM	17LM	22LM	27LM	32LM
2700K	0.95	0.83	0.68	0.39	0.50	0.68	0.84	1.0
3000K	1.00	0.87	0.73					
3500K	1.02	0.89	-					
4000K	1.04	-	-					

\*Refer to website for additional photometry (alternate trims, CCT/CRI, lumen packages)


**DIMMER COMPATIBILITY**
**Phase Dimming (FPC) - Incandescent, Magnetic Low Voltage and Electronic Low Voltage Dimming**

- Dimming range of 100% down to as low as 1% a minimum load of one fixture
- Dimming range and maximum rated load vary depending on dimmer type and model. See maximum load calculations below to identify max number of luminaires per dimmer.

**Incandescent (INC) and Magnetic Low Voltage (MLV)**

Example: Fixture Rating = 13W; Dimmer Rating = 600W  
 Equivalent Incandescent Load (EIL) = 50%  
 $(600/13W) \times 0.5 = 23$  Fixtures per Dimmer

**Electronic Low Voltage (ELV)**

Example: Fixture Rating = 13W; Dimmer Rating = 600W  
 Equivalent Incandescent Load (EIL) = 75%  
 $(600/13W) \times 0.75 = 34$  Fixtures per Dimmer

**INCANDESCENT, MLV, ELV WALL DIMMERS**

Manf.	Product Family	Series	Type	Min Light(%)
Lutron	Glyder	GLV*	MLV	2
Leviton	SureSlide	6633*	INC	2
Lutron	Diva	DVLV	MLV	6
Lutron	Diva	DV*	INC	2
Lutron	Skylark	SLV*	MLV	3
Lutron	RadioRA 2	RRD-6D*	INC	2
Lutron	RadioRA 2	RRD-10ND*	INC	2
Leviton	SureSlide	6613	MLV	5
Leviton	IllumaTech	IPL06-10Z*	INC	3
Lutron	Diva	DVCL	INC	3
Insteon	Keypad Dimmer	2334-232	INC	2
Insteon	Dimmer Switch	2477D*	INC	2
Control4	Forward Phase Dimmer	C4-FPD 120	INC	2
Lutron	Nova	NTELV	ELV	6
Lutron	Diva	DVELV*	ELV	2
Lutron	Lutron Maestro	MAELV*	ELV	5
Leviton	Vizia	VPE06-1LX	ELV	2
Leviton	Illumatech	IPE04*	ELV	5
Lutron	Lutron RadioRA2	RRD-6NA	PHA	2
Control4	Adaptive Phase Dimmer	C4-APD 120	PHA	2
Lutron	RadioRA2	RRD-6NA*	PHA	2
Control4	Adaptive Phase Dimmer	C4-APD 120	PHA	2

**INTEGRATED CONTROL SYSTEMS**

Manf.	Product Family	Series	Type	Min Light(%)
Lutron	LP	LP-RPM-4U	INC	5
Lutron	LP	LP-RPM-4A*	PHA	2
Lutron	GrafikEye QS	QSGRJ-3P	PHA	2
Lutron	GrafikEye QS	PHPM-PA-120	PHA	2
Lutron	HomeWorks QS	PHPM-PA-120	PHA	2
Lutron	HomeWorks QS	HW-RPM-4A*	PHA	2
Acuity	nLight nSP5PCD ELV	nSP5PCD*	ELV	4
Insteon	Micro Module Dimmer	2442-222*	INC	2
Control4	8 Ch Dimmer	C4-DIN-8DIM-E	PHA	2

**0-10V Dimming (GZ1, EZ1, EZB drivers)**
**WALL DIMMERS**

Manf.	Product Family	Series	Type	-EZ1/-GZ1 Min. Light (%)	-EZB Min. Light (%)
Lutron	Diva	DVTV	0-10V	1	<1
Lutron	Nova	NFTV	0-10V	1	<1
Lutron	Nova T	NTFTV	0-10V	1	<1

**INTEGRATED CONTROL SYSTEMS**

Manf.	Product Family	Series	Type	-EZ1/-GZ1 Min. Light (%)	-EZB Min. Light (%)
Lutron	GrafikEye QS	GRX-TVI*	0-10V	1	<1
Lutron	HomeWorks QS	GRX-TVI*	0-10V	1	<1
Lutron	HomeWorks QS	GRX-TVM2*	0-10V	1	<1
Lutron	LCP128	GRX-TVI*	0-10V	1	<1
Lutron	LCP128	GRX-TVM2*	0-10V	1	<1
Lutron	LP	GRX-TVM2*	0-10V	1	<1
Lutron	RadioRA2	LMJ-5T-DV-B	0-10V	1**	<1
Crestron	GreenLight	DIN-4DIMFLV4	0-10V	1	<1
Lutron	Energi Tripak	RMJ-5T-DV-B	0-10V	1	<1
Wattstopper	DLM	LMRC-211	0-10V	1	<1
Insteon	Ballast Dimmer	2475DA2	0-10V	1	<1

\*: Aculux recommended dimmers

\*\*: Not tested with -GZ1

+: Requires a separate relay module to turn luminaire on/off