

DESCRIPTION

4 inch round or square surface mount cylinder in choice of matte black, white, bronze or silver paint can be used to blend with or accent various architectural styles. Designed for ceiling mount, wall mount, aircraft cable or stem mount. Offered with narrow, medium, or wide beam downlight or wall wash. Featuring a two-stage diffused reflector system producing smooth distribution with excellent light control and low aperture brightness. Lumen packages range from 1000 to 3000 with color temperatures of 2400K, 2700K, 3000K, 3500K, 4000K, and 5000K. Available with dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space.

SPECIFICATION FEATURES

Reflector

Painted die cast aluminum or spun aluminum lower reflector with a lensed upper optical chamber providing superior lumen output with minimal source brightness. Square surface mount available with square or round reflectors. Spun reflectors are offered in all Portfolio Alzak® finishes. Reflector is retained with two torsion springs holding the flange tight to the lower cylinder lip.

Trim Retention

Lower reflector is retained with two torsion springs holding the flange tightly to the cylinder.

Housing

Round seamless .050 spun aluminum housing or soft square extruded aluminum available in white, bronze, silver or matte black.

Mounting

Ceiling mounting plate installs to mounted junction box, cylinder mounts to plate with easy twist and lock hooks.

Wall mounting arm attaches directly to junction box with robust mounting plate.

Thermal

Aluminum heat sink conducts heat away from the LED module for optimal performance and long life.

LED

Chip on board with a multitude of highly efficient white LED's, combined with a high reflectance upper reflector and convex transitional lens produces even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Color variation within 3-step MacAdam ellipses. Flexible disconnect allows for tool-less replacement of LED engine from below fixture. Available in 80, 90 or 97 CRI. D2W™ – dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

Catalog

Project

Comments

Prepared by

Type

Date

Driver

Standard 120-277V 0-10V dimming driver provides flicker free dimming from 100% to 1%. Optional 120V leading edge, <1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver must be serviced from above.

Code Compliance

Surface, ceiling and wall mount cULus listed for wet locations. Up/down and pendant mount are cULus listed for damp location. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. RoHS Compliant. Photometric testing completed in accordance with IES LM 79 standards. LED life testing completed in accordance with LM 80 standards.

Warranty

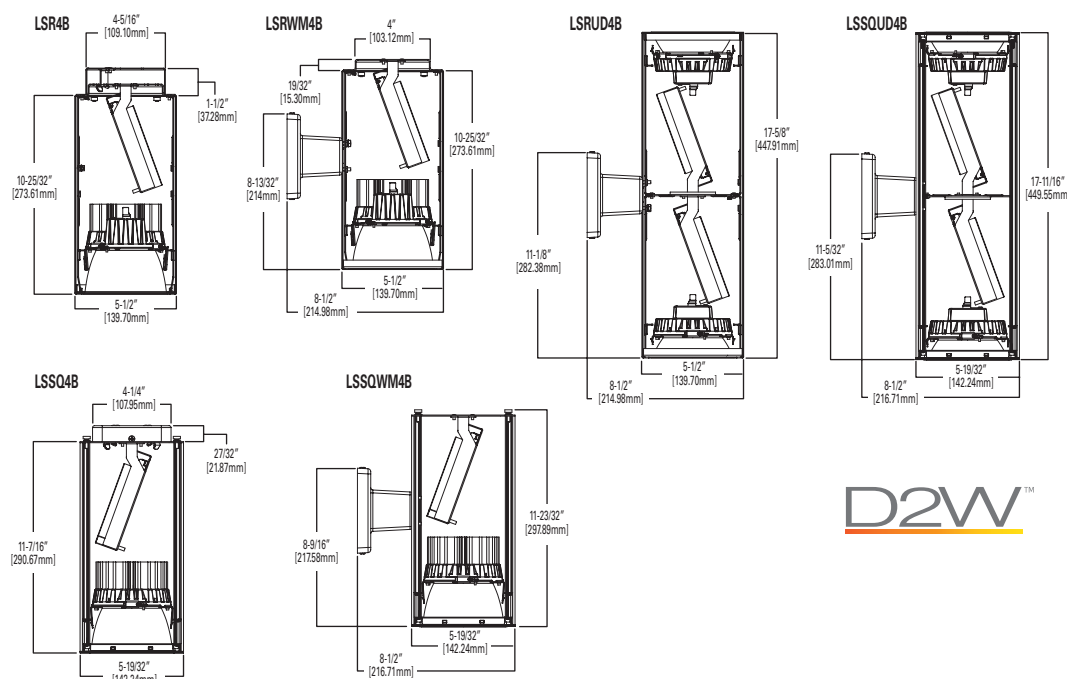
5-year warranty.



**LSR4B/
LSRWM4B
LSRUD4B
LSSQRWM4B
LSSQRUD4B
EC4B
4LB**

1000 - 4000 Lumen LED

4-Inch Round or Square
Surface Mount
Cylinder Downlight



D2W™

ORDERING INFORMATION

SAMPLE NUMBER: LSR4B10D010PEC4B109030

Housing	Lumens ¹	Driver	Cylinder Finish
LSR4B = LED 4" Aperture, Surface Mount LSSQS4B = LED 4" Square Aperture, Square Surface Mount (use with square trim) LSSQR4B = LED 4" Round Aperture, Square Surface Mount (use with round trim) LSRWM4B = LED 4" Aperture, Surface Wall Mount LSRUD4B = LED 4" Aperture, Surface Wall Mount Up/Down (requires 2 trims and light engines) ⁸ LSSQSWM4B = LED 4" Square Aperture, Square Surface Wall Mount (use square trim) LSSQRWM4B = LED 4" Round Aperture, Square Surface Wall Mount (use round trim) LSSQSUD4B = LED 4" Square Aperture, Square Surface Wall Mount Up/Down (use with square trim, 2 required) ⁸ LSSQRUD4B = LED 4" Round Aperture, Square Surface Wall Mount Up/Down (use with round trim, 2 required) ⁹	10 =1000 lumens 15 =1500 lumens 20 =2000 lumens 30 =3000 lumens 40 =4000 lumens	1000 - 3000 Lumen D010 = 120-277V 0-10V 5% Dimming D010TR = 0-10V or line voltage dimming, 5% to 100% DLE = Lutron Ecosystem dimming 1% to 100% DL3 = 1 to 100% Dimming, 120-277V Lutron® Hi-Lume 3 Wire DL2 = 1 to 100% Dimming, 120V Lutron® Hi-Lume Forward Phase Dimming 1000 or 1500 Lumen DE010 = 120-277V 0-10V 1% Dimming D5LT = Fifth Light® (Dali) Dimming DMX = DMX Dimming DMXC5 = RJ45 ports for use with CAT5	P = White MB = Matte Black SL = Painted Silver BZ = Bronze

SAMPLE NUMBER: EC4B10208035

Power Module	Lumen Levels ¹	CRI	Color		
EC4B = 4" LED Module	1020 =1000, 1500, 2000 lumens 3040 =3000-4000 lumens 1015IC =1000, 1500 lumen IC rated	80 =80 CRI Minimum 90 =90 CRI Minimum 97 =97 CRI Minimum	80 CRI 27 =2700K 30 =3000K 35 =3500K 40 =4000K 50 =5000K	90 CRI 24 =2400K 27 =2700K 30 =3000K 35 =3500K 40 =4000K 50 =5000K	97 CRI 27 =2700K 30 =3000K
	Dim 2 Warm 109030D2W =1000 lumen, 90 CRI Dim 2 Warm 159030D2W =1500 lumen, 90 CRI Dim 2 Warm 209030D2W =2000 lumen, 90 CRI Dim 2 Warm				

SAMPLE NUMBER: 4LBM0LI

Trim	Distribution ²	Flange	Finish
Round 4LB =4" LED, round	Round N =Narrow (25° Beam), Spun Aluminum M =Medium (50° Beam), Spun Aluminum W =Wide (75° Beam), Spun Aluminum S =Shallow (75° Beam), Spun Aluminum CS =Cast Shallow (75° Beam), Die Cast Aluminum SW =Single Wall Wash, Spun Aluminum DW =Double Wall Wash, Spun Aluminum	0 =White Polymer Trim Ring (use with spun reflector) 3 =Rimless (use with die cast)	LI =Specular Clear ³ H =Semi-Specular Clear ³ WMH =Warm Haze ³ WH =Wheat ³ GPH =Graphite Haze ³ B =Specular Black ² MW =Matte White MB =Matte Black ⁷ MMS =Matte Metallic Silver ⁶
Square 4LBSQ =4" LED, square	Square SQ =Anodized Aluminum CSSQ =Shallow Die Cast Aluminum LWW =Lensed Wall Wash		

Accessories

Pendant Kit P834P =36" white pendant stem kit P834BZ =36" bronze pendant stem kit P834MB =36" matte black pendant stem kit P834SL =36" silver pendant stem kit Aircraft cable AC4120P =120" white aircraft cable kit AC448P =48" white aircraft cable kit AC4120MB =120" black aircraft cable kit AC448MB =48" black aircraft cable kit	Type Blank =5 conductor for use with 0-10V driver 3C =3 conductor for use with 120 or 277V 5C = conductor for use with D5LT drivers 6C =6 conductor for use with DL3 DMX =No conductors for use with DMX driver
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Accessory

LNS4RUD=up/down gasketed lens, wet location, round
LNS4SQUD=up/down gasketed lens, wet location, square

Notes:

- 1 Nominal Lumens will vary depending on selected color, driver and reflector finish.
- 2 Beam angles are nominal with LI finish trims.
- 3 Not available on CS or BA distributions.
- 4 Only available with Matte White and Matte Black Finishes.
- 5 Only available on BA distribution.
- 6 Available only on CS distributions.
- 7 Available with BA and CS distributions.
- 8 Only available with S and CS trims.
- 9 Only available with CSSQ trims.

ENERGY

ENERGY DATA
Sound Rating: Class A standards (Values at non-dimming line voltage)
Minimum Starting Temperature: -30°C (-22°F)
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)
Input Voltage: UNV (120V - 277V)
Power Factor: >0.90 (at nominal input: 120-277 VAC & 100% of Rated Output Power)
Input Frequency: 50/60Hz

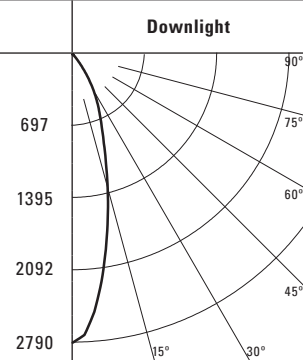
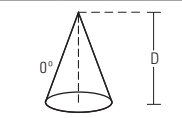
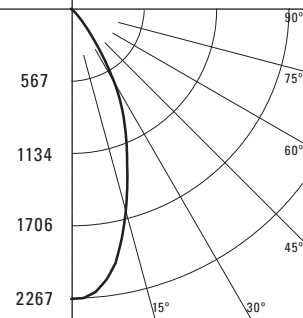
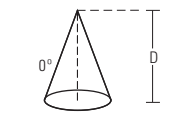
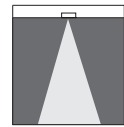
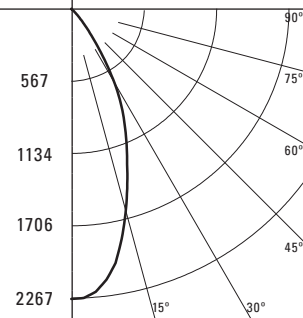
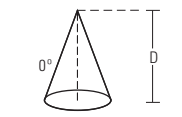
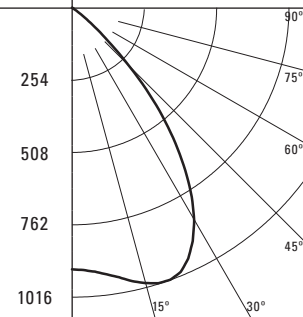
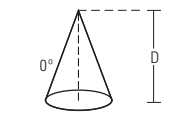
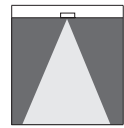
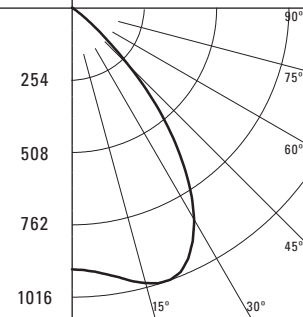
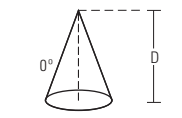
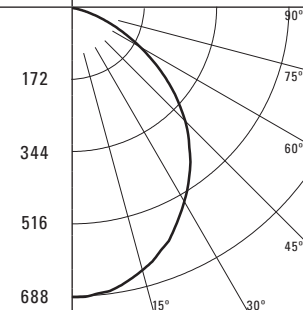
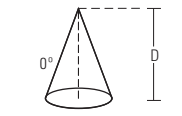
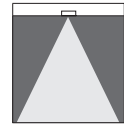
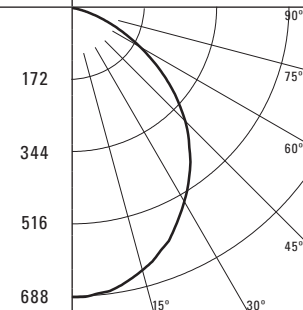
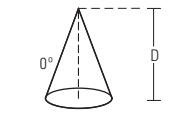
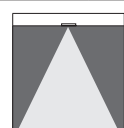
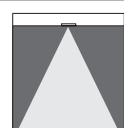
1000 Lumen D010		1500 Lumen D010	
Input Power: 11W	THD: <14%	Input Power: 15.5W	THD: <13%
120V Input Current: 0.09A	277V Input Current: 0.04A	120V Input Current: 0.13A	277V Input Current: 0.06A

2000 Lumen D010		3000 Lumen D010	
Input Power: 21.2W	THD: <9%	Input Power: 27.6W	THD: <10%
120V Input Current: 0.18A	277V Input Current: 0.08A	120V Input Current: 0.23A	277V Input Current: 0.10A

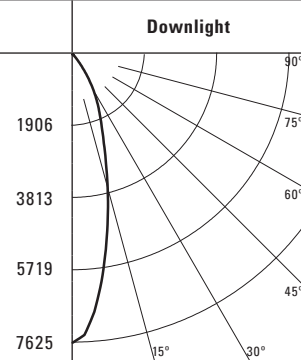
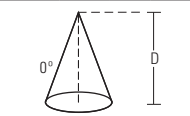
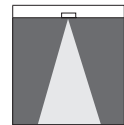
4000 Lumen D010	
Input Power: 41.6W	THD: <13%
120V Input Current: 0.35A	277V Input Current: 0.15A

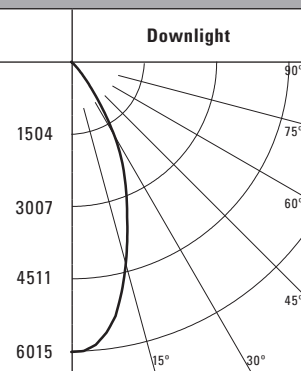
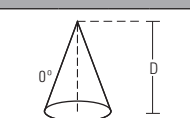
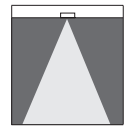
Lumens	120V		277V	
	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
1000 Lumen D010	1.02	0.041	2.18	0.021
1500 Lumen D010	1.02	0.042	2.24	0.064
2000 Lumen D010	1.02	0.077	2.43	0.027
3000 Lumen D010	1.15	0.067	3.26	0.027
4000 Lumen D010	1.2	0.088	3.9	0.03

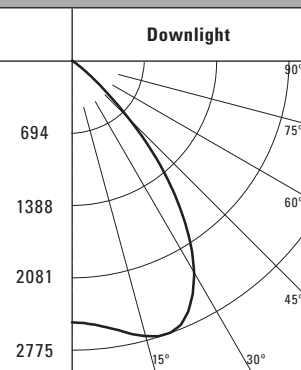
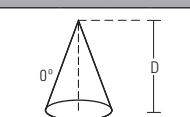
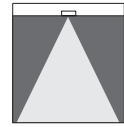
PHOTOMETRY

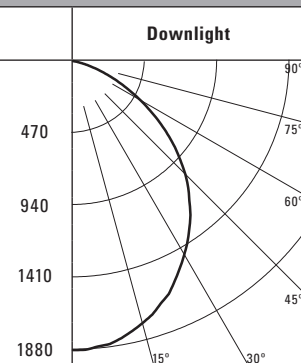
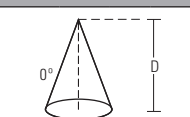
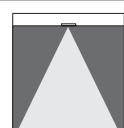
NARROW (25° BEAM)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE							
Test Number	P201208					Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance						
Housing	LSR4B					0	2790	0-30	926	82.1	45	489						
Module	EU4B10208035					5	2550	0-40	1094	97	55	55						
Trim	4LBN1LI					15	1421	0-60	1127	99.9	65	26						
Lumens	1128					25	667	0-90	1128	100	75	0						
Efficacy	78.9 Lm/W					35	266	90-180	0	0	85	0						
SC	0.5					45	32	0-180	1128	100								
						55	3											
						65	1											
						75	0											
						85	0											
						90	0											
MEDIUM (50° BEAM)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE							
Test Number	P201206					Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance						
Housing	LSR4B					0	2267	0-30	1144	77.3	45	1072						
Module	EU4B10208035					5	2227	0-40	1406	95	55	151						
Trim	4LBM1LI					15	1690	0-60	1477	99.7	65	77						
Lumens	1481					25	1027	0-90	1481	100	75	42						
Efficacy	103.6 Lm/W					35	409	90-180	0	0	85	0						
SC	0.71					45	70	0-180	1481	100								
						55	8											
						65	3											
						75	1											
						85	0											
						90	0											
WIDE (75° BEAM)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE							
Test Number	P201204					Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance						
Housing	LSR4B					0	914	0-30	816	53.8	45	4372						
Module	EU4B10208035					5	925	0-40	1252	82.5	55	574						
Trim	4LBW1LI					15	998	0-60	1513	99.7	65	100						
Lumens	1518					25	977	0-90	1518	100	75	42						
Efficacy	106.2 Lm/W					35	707	90-180	0	0	85	0						
SC	1.3					45	286	0-180	1518	100								
						55	30											
						65	4											
						75	1											
						85	0											
						90	0											
SHALLOW (75° BEAM)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE							
Test Number	P201210					Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance						
Housing	LSR4B					0	688	0-30	512	34.2	45	5827						
Module	EU4B10208035					5	682	0-40	816	54.5	55	4771						
Trim	4LBCS1MMS					15	645	0-60	1333	89	65	3226						
Lumens	1497					25	577	0-90	1497	100	75	1339						
Efficacy	104.7 Lm/W					35	486	90-180	0	0	85	124						
SC	1.16					45	380	0-180	1497	100								
						55	253											
						65	126											
						75	32											
						85	1											
						90	0											

PHOTOMETRY

NARROW (25° BEAM)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	PP201209					Degrees Vertical	Canдела	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance
Housing	LSR4B					0	7625	0-30	2531	82.1	45	1337
Module	EU4B30408035					5	6969	0-40	2989	97	55	149
Trim	4LBN1LI					15	3883	0-60	3080	99.9	65	67
Lumens	3083					25	1822	0-90	3083	100	75	0
Efficacy	73.8 Lm/W					35	727	90-180	0	0	85	0
SC	0.5					45	87	0-180	3083	100		
90						0						
0												

MEDIUM (50° BEAM)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P201207					Degrees Vertical	Canдела	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance
Housing	LSR4B					0	6015	0-30	3036	77.3	45	2844
Module	EU4B30408035					5	5909	0-40	3731	95	55	400
Trim	4LBM1LI					15	4484	0-60	3918	99.7	65	205
Lumens	3929					25	2725	0-90	3929	100	75	113
Efficacy	94 Lm/W					35	186	90-180	0	0	85	0
SC	0.71					45	21	0-180	3929	100		
65						8						
75						3						
85						0						
90						0						

WIDE (75° BEAM)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P201205					Degrees Vertical	Canдела	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance
Housing	LSR4B					0	2499	0-30	2230	53.8	45	11948
Module	EU4B30408035					5	2528	0-40	3421	82.5	55	1569
Trim	4LBW1LI					15	2727	0-60	4134	99.7	65	274
Lumens	4148					25	2670	0-90	4148	100	75	113
Efficacy	99.2 Lm/W					35	1933	90-180	0	0	85	0
SC	1.3					45	780	0-180	4148	100		
55						83						
65						11						
75						3						
85						0						
90						0						

SHALLOW (75° BEAM)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P201211					Degrees Vertical	Canдела	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance
Housing	LSR4B					0	1880	0-30	1400	34.2	45	15933
Module	EU4B30508035					5	1864	0-40	2230	54.5	55	13046
Trim	4LBCS1MMS					15	1763	0-60	3645	89	65	8819
Lumens	4093					25	1578	0-90	4093	100	75	3657
Efficacy	97.9 Lm/W					35	1329	90-180	0	0	85	323
SC	1.16					45	1040	0-180	4093	100		
55						691						
65						344						
75						87						
85						3						
90						0						