

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.

CONSTRUCTION — Retrofit, remodel, and new construction mounting types. See table for compatible ceiling openings and thickness range.

Optional goof rings available for additional overlap trim coverage.

1/2"-1-1/2" ceiling thickness

25° ambient temperature

New construction frame accessories approved for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring.

OPTICS — 55° cutoff

1.0 S/MH standard (wallwash reflector available)

80CRI standard (90CRI optional)

ELECTRICAL — Adjustable lumen output with three module options. Fixed lumen options also available. MVOLT 120/277V 50/60Hz driver (0-10V & 120V Phase Dimming to 10% min dimming level)

100LPW typical

FCC CFR Title 47 Part 15 Class A for lower lumen range. FCC CFR Title 47 Part 15 Class B for higher lumen range.

L80 at 60,000 hours

3 SDCM

LISTINGS — Certified to US and Canadian safety standards. Damp location standard (Wet location, covered ceiling optional). Some configurations are ENERGY STAR® certified, please visit www.energystar.gov for specific products. TAA compliant.

WARRANTY — 5-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

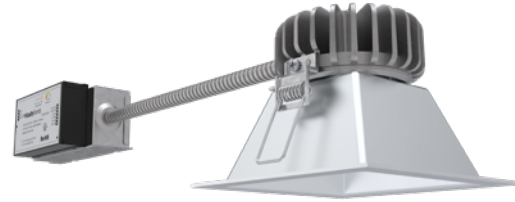
All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

Catalog Number
Notes
Type

LBR Square

**4-6" OPEN
Retrofit Downlight**



A+ Capable options indicated by this color background.

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: LBR6SQ ALO2 SWW1 AR LSS MWD MVOLT UGZ 90CRI

Series	Lumens ¹	Color temperature ¹	Reflector Color	Reflector Flange	Reflector Finish
LBR4SQ 4" Square Retrofit	Adjustable Lumen Output	Switchable CCT	AR Clear	(blank) Self-flanged	LSS Semi-specular
LBR6SQ 6" Square Retrofit	ALO1 500/750/1000lm	SWW1 3000K-3500K-4000K-5000K	WR ² White painted	TRW ³ White painted flange	
LBR4SQWW 4" Square Retrofit Wallwash	ALO2 1000/1500/2000lm	Fixed CCT	BR ² Black painted	TRBL ⁴ Black painted flange	
LBR6SQWW 6" Square Retrofit Wallwash	ALO3 2000/2500/3000lm	30K 3000K			
	Fixed Lumen Output	35K 3500K			
	05LM 500lm	40K 4000K			
	07LM 750lm	50K 5000K			
	10LM 1000lm				
	15LM 1500lm				
	20LM 2000lm				
	25LM 2500lm				
	30LM 3000lm				

Distribution	Voltage	Driver	Options
MWD Medium wide (1.0 s/mh)	MVOLT 120V - 277V	UGZ Universal dimming to 10% 0-10V; line voltage dimming (120V)	90CRI High CRI (90+)
WW ⁵ Wallwash		DALI ⁶ DALI dimming to 1%	AT ⁷ Airtight
			E10WCPR ⁸ Batterypack (10W constant power) remote test switch
			ELR ⁸ Batterypack (10W constant power) Non-T20 Compliant remote test switch
			EC1 ⁹ Extended Conduit (18")
			EC6 ⁹ Extended Conduit (6ft)
			WL ⁷ Wet Location
			QDS ¹⁰ Quick disconnect plugs

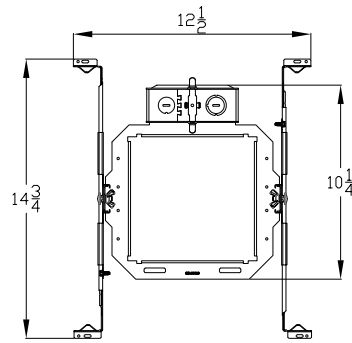
Notes

- Fixed CCT and lumens must be specified together (for example: 10LM 30K).
- Not available with reflector finish.
- For use with Clear (AR) reflector finish only. Not applicable with WR (white reflector).
- For use with Clear (AR) reflector finish only. Not applicable with BR (Black reflector).
- Only available with WW Series (for example LBR4SQWW).
- Not available with Fixed CCT and lumens.
- Not available with wallwash (WW).
- Top access installation or 17.5" plenum clearance required for roomside installation.
- Not available with QDS, ELR and E10WCPR.
- QDS not available with emergency battery packs.
- Field installed. Top access installation required.

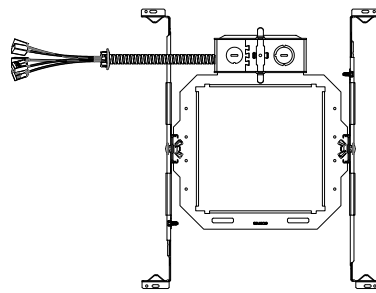
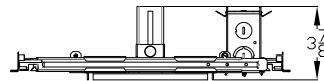
Accessories: Order as separate catalog number. Shipped separately.	
LBR46 SQFPAN U	Mounting plate 4"-8" unit pack
LBR46 SQFPAN J10	Mounting plate 4"-8" 10-pack
LBR4SQPF	4" New construction frame with JBOX
LBR6SQPF	6" New construction frame with JBOX
LBR4SQPFW	4" New construction frame with JBOX, 18" conduit
LBR6SQPFW	6" New construction frame with JBOX, 18" conduit
LBR4SQPFWQDS	4" New construction frame with JBOX, 18" conduit, quick disconnects
LBR6SQPFWQDS	6" New construction frame with JBOX, 18" conduit, quick disconnects
LBR8SQPFWQD	8" New construction frame with JBOX, 18" conduit, quick disconnects
LBR SDT 347V 75W ASM	Field installed 347V Step-down transformer
NPP16 D EFP ¹¹	Field installed nLight Power Pack

Fixture	Plaster Frame Accessory	Compatible Mounting Option
LBR4SQ, LBR4SQWW	LBR4SQPF	QDS, EC1, ELR, E10WCPR
	LBR4SQPFW	Base fixture only
	LBR4SQPFWQDS	QDS fixture only
LBR6SQ, LBR6SQWW	LBR6SQPF	QDS, EC1, ELR, E10WCPR
	LBR6SQPFW	Base fixture only
	LBR6SQPFWQDS	QDS fixture only

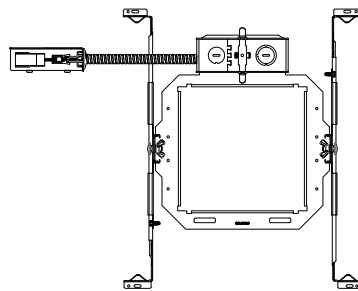
* All dimensions are inches (millimeters) unless otherwise noted.



New Construction Frame



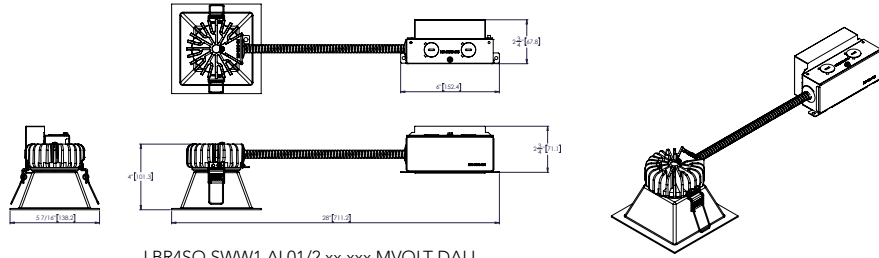
New Construction Frame, 18" conduit



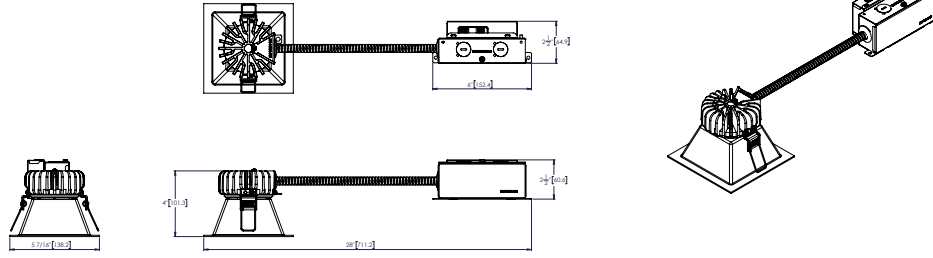
New Construction Frame, QDS

Aperture Size	Ceiling Cutout
4 in	5-1/8" x 5-1/8"
6 in	6-3/4" x 6-3/4"

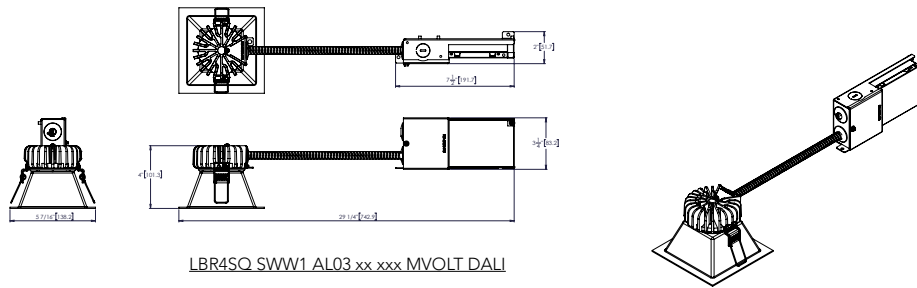
* All dimensions are inches (millimeters) unless otherwise noted.



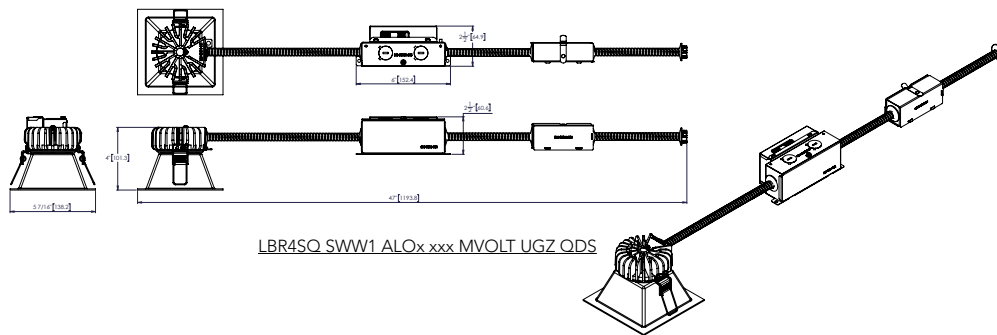
LBR4SQ SWW1 AL01/2 xx xxx MVOLT DALI



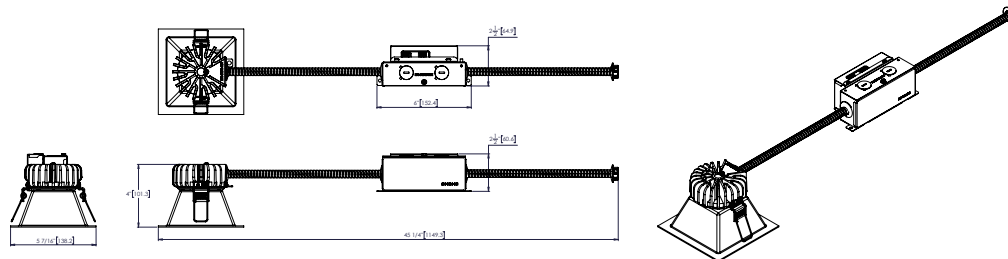
LBR4SQ SWW1 AL0x xx xxx MVOLT UGZ



LBR4SQ SWW1 AL03 xx xxx MVOLT DALI



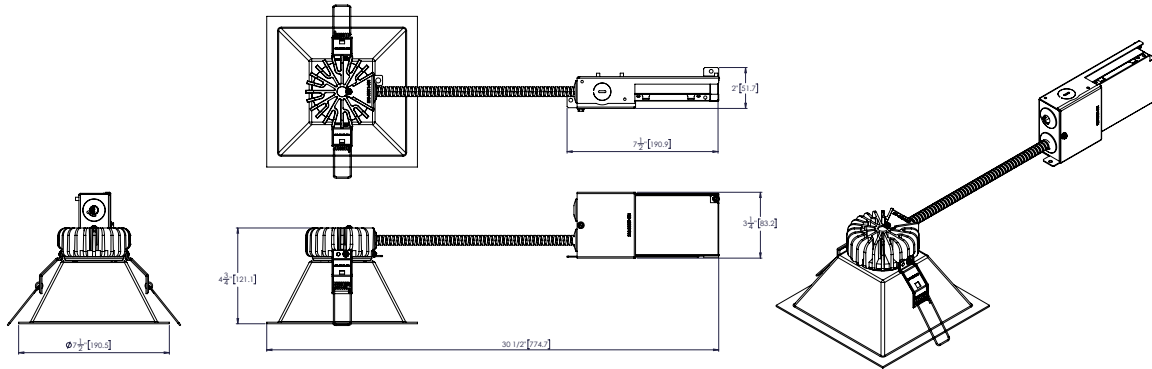
LBR4SQ SWW1 AL0x xxx MVOLT UGZ QDS



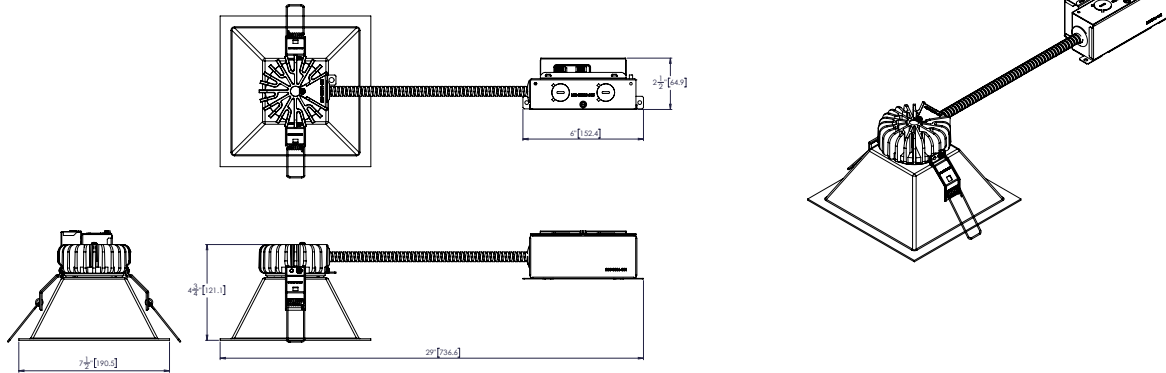
LBR4SQ SWW1 AL0x xxx MVOLT UGZ EC1

LBR_SQ

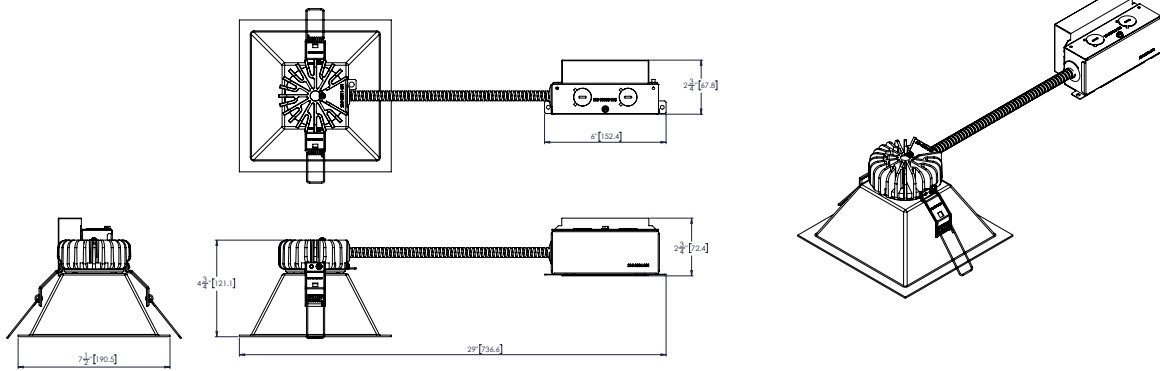
* All dimensions are inches (millimeters) unless otherwise noted.



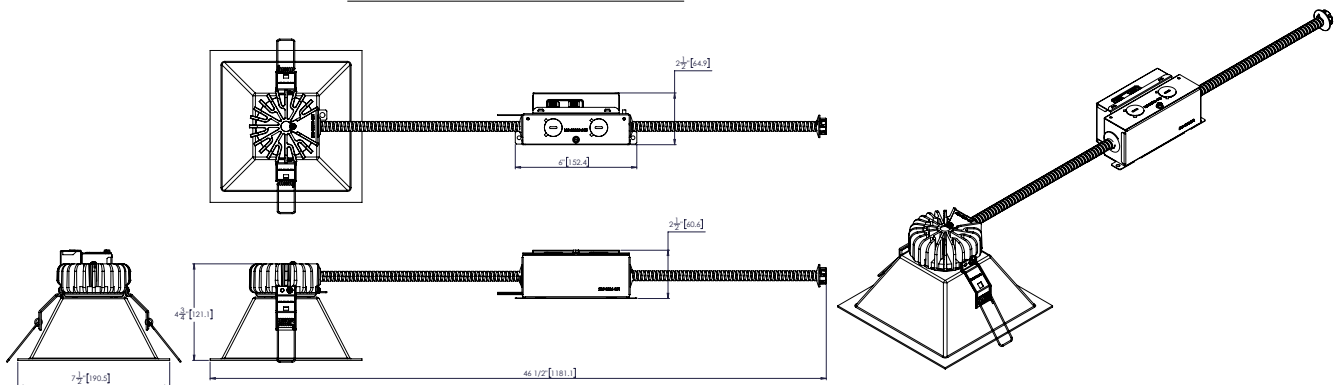
LBR6SQ SWW1 AL03 xx xxx MVOLT DALI



LBR6SQ SWW1 AL0x xx xxx MVOLT UGZ



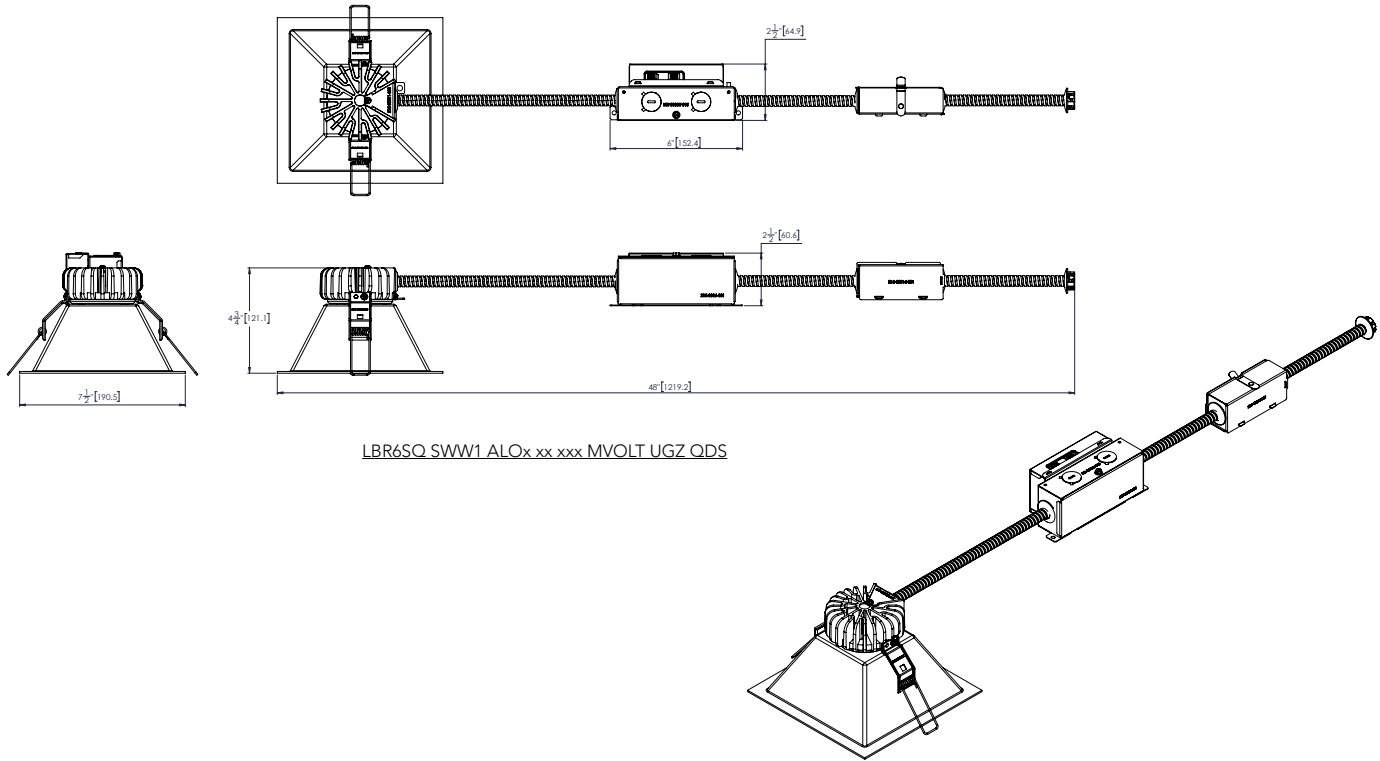
LBR6SQ SWW1 AL01/2 xx xxx MVOLT DALI



LBR6SQ SWW1 ALOx xx xxx MVOLT UGZ EC1

LBR_SQ

* All dimensions are inches (millimeters) unless otherwise noted.



LUMEN OUTPUT MULTIPLIERS - CCT			
3000K	3500K	4000K	5000K
0.98	1.0	1.01	1.03

LUMEN OUTPUT MULTIPLIERS - FINISH	
Specular (LS)	1.00
White (WR)	1.03
Black (BR)	0.60

HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

P = Output power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

The LPW rating is also available at Designlight Consortium.

LBR SQUARE LUMEN TABLES

LBR4SQ		80CRI							
Lumen Output	Wattage	30K/80CRI		35K/80CRI		40K/80CRI		50K/80CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	492	85	503	87	515	88	531	90
AL01 (750LM)	9	778	88	796	89	815	91	840	93
AL01 (1000LM)	13	1093	85	1118	86	1145	88	1180	90
AL02 (1000LM)	13	1158	93	1185	95	1213	97	1251	99
AL02 (1500LM)	19	1691	90	1730	92	1771	93	1826	96
AL02 (2000LM)	25	2130	86	2179	87	2231	89	2300	91
AL03 (2000LM)	25	2191	89	2242	90	2295	92	2366	94
AL03 (2500LM)	32	2645	84	2707	86	2771	87	2857	89
AL03 (3000LM)	38	3004	80	3074	81	3147	83	3244	85

LBR4SQWW		80CRI							
Lumen Output	Wattage	30K/80CRI		35K/80CRI		40K/80CRI		50K/80CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	480	83	491	85	503	86	518	88
AL01 (750LM)	9	760	85	777	87	796	88	821	91
AL01 (1000LM)	13	1067	83	1091	84	1117	86	1152	88
AL02 (1000LM)	13	1131	91	1157	93	1185	94	1221	96
AL02 (1500LM)	19	1651	88	1689	90	1729	91	1783	93
AL02 (2000LM)	25	2079	84	2127	85	2178	87	2246	89
AL03 (2000LM)	25	2139	87	2189	88	2241	90	2310	92
AL03 (2500LM)	32	2582	82	2642	84	2705	85	2789	87
AL03 (3000LM)	38	2933	78	3001	79	3072	81	3168	83

		90CRI							
Lumen Output	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	430	75	441	76	453	78	465	79
AL01 (750LM)	9	680	77	699	78	717	80	735	81
AL01 (1000LM)	13	955	74	981	76	1007	77	1033	78
AL02 (1000LM)	13	1012	82	1040	83	1067	85	1095	86
AL02 (1500LM)	19	1478	79	1518	80	1558	82	1598	84
AL02 (2000LM)	25	1861	75	1912	76	1962	78	2013	79
AL03 (2000LM)	25	1915	77	1967	79	2019	81	2071	82
AL03 (2500LM)	32	2312	74	2375	75	2437	77	2500	78
AL03 (3000LM)	38	2626	70	2697	71	2768	73	2839	74

		90CRI							
Lumen Output	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	420	73	431	74	442	76	454	77
AL01 (750LM)	9	664	75	682	76	700	78	718	79
AL01 (1000LM)	13	932	72	958	74	983	75	1008	77
AL02 (1000LM)	13	988	80	1015	81	1042	83	1069	84
AL02 (1500LM)	19	1443	77	1482	79	1521	80	1560	82
AL02 (2000LM)	25	1817	73	1866	75	1916	76	1965	78
AL03 (2000LM)	25	1870	76	1920	77	1971	79	2022	80
AL03 (2500LM)	32	2257	72	2318	73	2379	75	2441	76
AL03 (3000LM)	38	2563	68	2633	70	2702	71	2772	72

LBR6SQ		80CRI							
Lumen Output	Wattage	30K/80CRI		35K/80CRI		40K/80CRI		50K/80CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	502	87	513	88	525	90	542	92
AL01 (750LM)	9	794	89	812	91	832	92	857	95
AL01 (1000LM)	13	1115	86	1141	88	1168	89	1204	92
AL02 (1000LM)	13	1182	95	1209	97	1238	99	1276	101
AL02 (1500LM)	19	1725	92	1765	94	1807	95	1863	97
AL02 (2000LM)	25	2173	87	2223	89	2276	90	2347	93
AL03 (2000LM)	25	2235	90	2287	92	2342	94	2414	96
AL03 (2500LM)	32	2699	86	2761	87	2827	89	2915	91
AL03 (3000LM)	38	3065	82	3136	83	3210	85	3310	87

LBR6SQWW		80CRI							
Lumen Output	Wattage	30K/80CRI		35K/80CRI		40K/80CRI		50K/80CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	499	87	511	88	523	90	539	92
AL01 (750LM)	9	790	89	808	90	827	92	853	94
AL01 (1000LM)	13	1109	86	1135	87	1162	89	1198	91
AL02 (1000LM)	13	1176	95	1203	96	1232	98	1270	100
AL02 (1500LM)	19	1716	92	1756	93	1798	95	1853	97
AL02 (2000LM)	25	2162	87	2212	88	2264	90	2335	92
AL03 (2000LM)	25	2224	90	2276	91	2330	93	2402	95
AL03 (2500LM)	32	2685	86	2747	87	2812	88	2900	91
AL03 (3000LM)	38	3049	81	3120	83	3194	84	3293	86

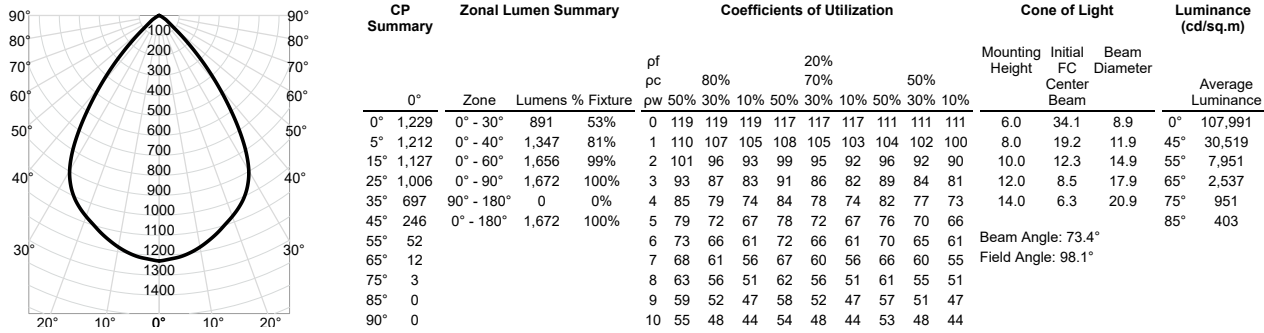
		90CRI							
Lumen Output	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	438	76	450	78	462	79	474	81
AL01 (750LM)	9	694	78	713	80	732	81	750	83
AL01 (1000LM)	13	974	76	1001	77	1027	79	1053	80
AL02 (1000LM)	13	1033	83	1061	85	1089	87	1117	88
AL02 (1500LM)	19	1508	80	1548	82	1589	84	1630	85
AL02 (2000LM)	25	1899	76	1950	78	2002	80	2053	81
AL03 (2000LM)	25	1954	79	2007	81	2060	82	2113	84
AL03 (2500LM)	32	2359	75	2423	77	2487	78	2550	80
AL03 (3000LM)	38	2679	71	2751	73	2824	74	2896	76

		90CRI							
Lumen Output	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	436	76	448	77	460	79	472	80
AL01 (750LM)	9	690	78	709	79	728	81	747	82
AL01 (1000LM)	13	969	75	996	77	1022	78	1048	80
AL02 (1000LM)	13	1028	83	1055	84	1083	86	1111	88
AL02 (1500LM)	19	1500	80	1541	82	1581	83	1622	85
AL02 (2000LM)	25	1889	76	1940	78	1992	79	2043	81
AL03 (2000LM)	25	1944	79	1997	80	2049	82	2102	83
AL03 (2500LM)	32	2347	75	2410	76	2474	78	2537	79
AL03 (3000LM)	38	2665	71	2737	72	2809	74	2882	75

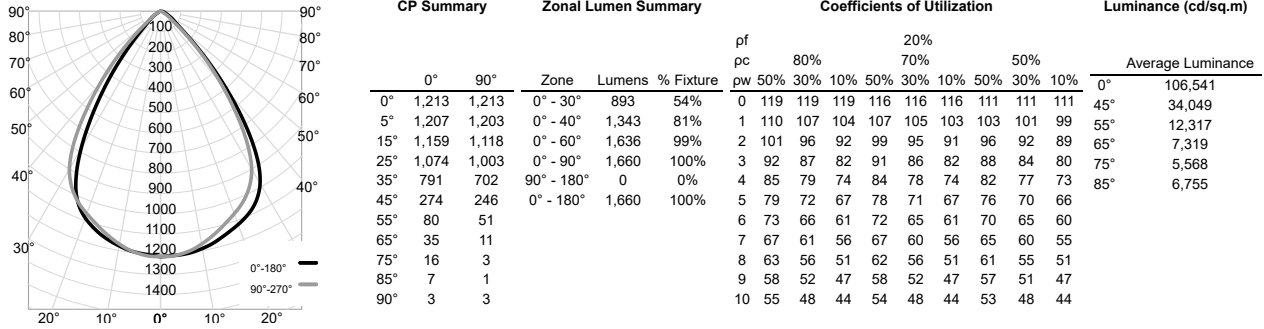
PHOTOMETRY

Distribution Curve Distribution Data Output Data Coefficient of Utilization Illuminance Data at 30" Above Floor for a Single Luminaire

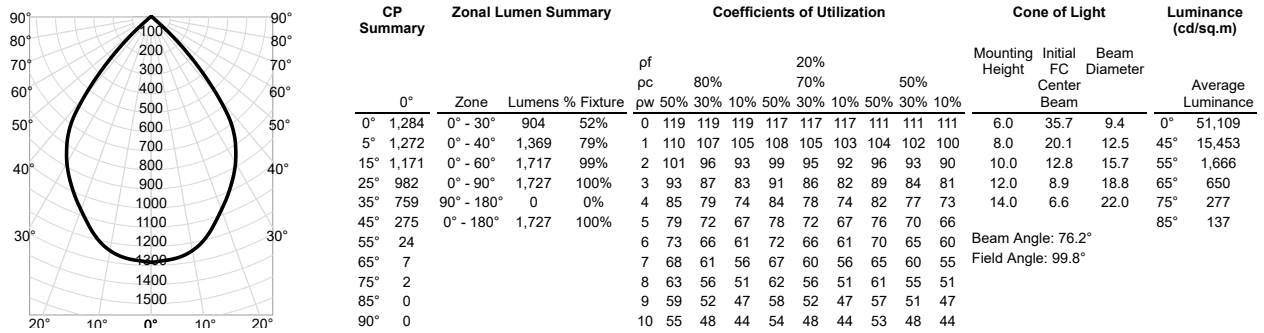
LBR4SQ SWW1 ALO2 AR LSS MWD 1500L 35K, Input Watts: 18.6, Delivered Lumens: 1672, LPW: 89.9, S/MH: 1.11, Test No: 20-667-1



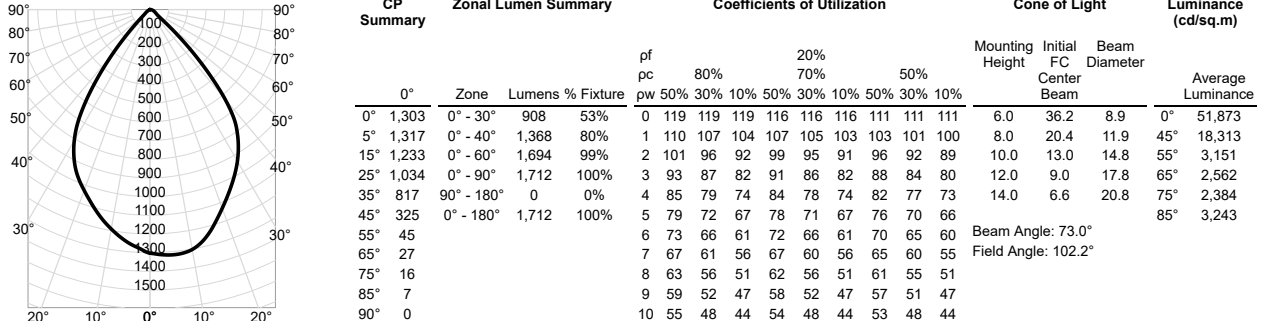
LBR4SQWW SWW1 ALO2 AR LSS WW MVOLT UGZ, Input Watts: 18.7, Delivered Lumens: 1660, LPW: 88.8, S/MH: 1.19, Test No: 20-526



LBR6SQ SWW1 ALO2 AR LSS MWD 1500L 35K, Input Watts: 18.6, Delivered Lumens: 1727, LPW: 92.8, S/MH: 1.05, Test No: 20-667-2



LBR6SQ SWW1 ALO2 AR LSS WW 1500L 35K, Input Watts: 18.6, Delivered Lumens: 1712, LPW: 92.0, S/MH: 1.09, Test No: 20-667-3



PLENUM DEPTH TABLE		
Aperture Size/Output	PLENUM DEPTH*	NON-IC MARKED SPACINGS
LBR4 500-1000 LM	3.44	
LBR4 1000-2000 LM	3.44	18 x 18 x 6
LBR4 2000-3000 LM	3.44	24 x 24 x 9
LBR6 500-1000 LM	4.18	
LBR6 500-1000 LM	4.18	18 x 18 x 6
LBR6 2000-3000 LM	4.18	24 x 24 x 9

*Above unfinished 1/2" ceiling plane

CEILING COVERAGE TABLE						
Series		Aperture	Trim Flange OD	Min ceiling opening	Ceiling Thickness	Max ceiling opening
LBR4	SQUARE	4-1/4"	5-7/16"	4-1/2"	1/2"-1-1/2"	5-1/8"
LBR6		6-1/4"	7-1/2"	6-1/2"	1/2"-1-1/2"	7-1/4"

DIMMER COMPATIBILITY

Not compatible with DALI or DMX dimmers. For specific compatible dimmers see below.

LINE VOLTAGE DIMMING:					
Type	Forward Phase	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)	Comment
MLV	Lutron Glyder GLV-600	YES	YES	YES	
INC	Leviton SureSlide 6633	YES	YES	YES	
MLV	Lutron Diva DVLV-600P	YES	YES	YES	
MLV	Lutron Skylark SLV-600P	YES	YES	YES	
INC	Lutron RadioRA 2 10ND	YES	YES	YES	
MLV	Leviton SureSlide 6613-PLW	YES	YES	YES	
INC	Lutron Diva DVCL-153P	YES	YES	YES	
MLV	Leviton IPM06	YES, 2x *	YES	YES	* min 2 fixtures
INC	Leviton IPI06	YES, 2x *	YES	YES	* min 2 fixtures
MLV	Synergy ISD 600LV	YES, 2x *	YES	YES	* min 2 fixtures
INC	Synergy ISD 600I	YES, 2x *	YES	YES	* min 2 fixtures
INC	Control4 C4-FPD 120	YES	YES	YES	
Type	Reverse Phase Dimmer Bank	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)	
ELV	Lutron Nova T NTELV-600	YES	YES	YES	
ELV	Lutron Diva DVELV 600P	YES	YES	YES	
ELV	Lutron Maestro MAELV 600	YES	YES	YES	
ELV	Leviton Vizia VPE06-1LX	YES	YES	YES	
ELV	Leviton Illumatech IPE04	YES	YES	YES	
ELV	Control4 C4-APD 120 REVERSE PHASE	YES	YES	YES	
Type	Miscellaneous Dimmers	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)	
PHA	Lutron RadioRA2 RRD-6NA	YES	YES	YES	
PHA	Lutron Maestro PRO LED+ RRD-PRO	YES	YES	YES	
Type	Control Systems	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)	
MLV	Lutron LP-RPM-4U	YES	YES	YES	
PHA	Lutron LP-RPM-4A	YES	YES	YES	
MLV	Lutron GRAPHIC EYE QSGRJ-3P	YES	YES	YES	
PHA	Lutron PA Power Module PHPM-PA-120	YES	YES	YES	
ELV	Lutron nLight nSP5PCD ELV	YES	YES	YES	

DIMMER COMPATIBILITY

Not compatible with DALI or DMX dimmers. For specific compatible dimmers see below.

0-10V DIMMING:						
Manufacturer	System Type	Description	P/N	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)
Lutron	Other	0-10V (sink or source) PowPak wireless dimming module	RMJ-5T-DV-B	YES	YES	YES
Wattstopper	Control System	Digital single relay room controller (0-10V)	LMRC-211	YES	YES	YES
Crestron	Control System	DIN Rail 0-10V fluorescent dimmer, 4 feeds, 4 channels (Green Light System)	DIN-4DIMFLV4	YES	YES	YES
Lutron	Other	Grafik Eye 0-10V adapter	GRX-TVI	YES	YES	YES
Leviton	Wall Box	Illumatech 0-10V	IP710-DLX	YES	YES	YES
Lutron	Control System	Mounted in the Homeworks QS panel - 0-10V dimmer (sink or source)	GRX-TVM2	YES	YES	YES
Lutron	Wall Box	Nova 0-10V wallbox dimmer (use with PP-120-H line voltage relay)	NTFTV	YES	YES	YES
Lutron	Wall Box	Nova 0-10V wallbox dimmer (use with PP-120-H line voltage relay)	NTSTV-DV	YES	YES	YES
Lutron	Wall Box	Nova T	NFTV	YES	YES	YES
Leviton	Wall Box	Renior II 0-10V	AWSMG-7DW	YES	YES	YES
ACUITY	Wall Box	sensorswitch, wall switch sensor, occupancy controlled dimming	WSX D WH	YES	YES	YES
ACUITY	Control System	nLight	nPP16D	YES	YES	YES
ACUITY	Control System	nLight	nPS 80 EZ	YES	YES	YES
ACUITY	Control System	nLight Air	rPP20 D	YES	YES	YES