LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

2BLTR Series LED Relight

2BLTR

2' x 4' Relight
LED

ATRIUS™ eldoLED nLIGHT®

FEATURES & SPECIFICATIONS

INTENDED USE —The BLTR Best-Value Low Profile LED Relight Assembly is a cost effective solution for renovating existing fluorescent troffer and parabolic fixtures while providing upgraded aesthetics and outstanding performance. The BLTR's popular center basket design offers a clean, versatile style, and volumetric distribution. The wide range of lumen packages and control and driver options make the BLTR a great choice for many applications including offices, schools, hospitals, retail spaces and other general lighting applications.

CONSTRUCTION — Universal end brackets are constructed of 22-gauge powder-painted steel and are secured to the host fixture with provided TEKS™ screws. The driver and light engine assembly is integrated in the BTLR door assembly making this an extremely "simple", time saving, relight solution. The door frame and reflector assembly is a made of cold-rolled steel and is painted after fabrication with a matte white powder paint for improved aesthetics and increased light diffusion. Diffuser trim rings provide an attractive mounting for integral sensors as well as adding a decorative element to the luminaire aesthetics.

LED boards and driver are accessible from below.

OPTICS — Volumetric illumination is achieved by creating an optimal mix of light to walls, partitions and vertical and horizontal work surfaces – rendering the interior space, objects and occupants in a more balanced, complimentary luminous environment. High performance extruded acrylic diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Four diffuser choices available - curved and square designs with linear prisms or a smooth frosted finish.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 80% LED lumen maintenance at 60,000 hours (L80/60,000).

Non-Configurable BLTR Relight: Generic 0-10 volt dimming driver. Dims to 10%

Configurable BLTR Relight: available in High Efficiency (HE) versions for applications where a lower wattage (over the standard product) is required. High Efficiency versions deliver >130 LPW and can be specified via the Lumen Package designations in the Ordering Information below.

eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Step-level dimming option allows system to be switched to 50% power for complaince with common energy codes while maintaining fixture appearance.

Optional integrated nLight®controls make each luminaire addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, nLight AIR RIO, RES7 occupancy sensors and photo controls. Simply connect all the nLight enabled control devices and the BLTR Relight assembly using standard Cat-5 cabling. Unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission. Lumen Management: Unique lumen management system (option N80) provides on board intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting. Driver disconnect provided where required to comply with US and Canadian codes.

SENSOR— Integrated sensor (individual control): Sensor Switch MSD7ADCX ((Passive infrared (PIR)) or MSDPDT7ADCX ((PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 4 for more details on the integrated sensor.

Integrated Sensor (nLight Wired Networking): This sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When wired, using CAT-5 cabling, with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. See page 4 for the nLight sensor options.

Integrated Smart Sensor (nLight Air Wireless Platform): The rES7 sensor is nLight AIR enabled, meaning it has the ability to communicate over the wireless nLight control platform. It is available with an automatic dimming photocell, and either a digital PIR or microphonics (PDT) dual technology occupancy sensor. It pairs to other luminaires and wall switches through our mobile app, CLAIRITY™, which allows for simple sensor adjustment. See page 4 for more details on the Integrated Smart Sensor.

INSTALLATION — After existing fluorescent components are removed from the host housing, universal end brackets are secured in place with TEKS™ screws. The BLTR's integrated driver and light engine door assembly can then be hinged to the universal end brackets and will hang in place for completion of assembly plug-in wiring. Rotate the doorframe assembly closed and pivot the cam latches to secure the doorframe in place. LED boards include plug-in connectors for easy replacement or servicing. Suitable for damp location installations. Damp location not available with sensor versions.

LISTINGS — UL/cUL Listed for use in fluorescent light fixtures. Installing Relight assemblies per instructions will not impact existing fixture UL listing. Tested to LM80 standards. DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

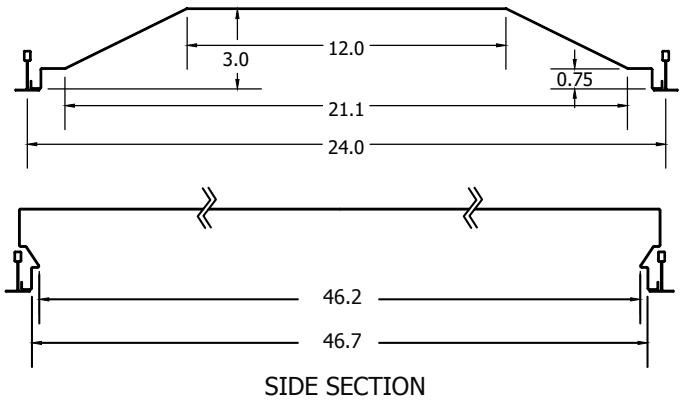
NOTE: Actual performance may differ as a result of end-user environment and application.

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

Specifications subject to change without notice.

Fit Compatibility:

The 2BLT4R Relight Assembly was designed to upgrade recessed 2x4 fixtures, including most parabolic and lensed troffers from all major manufacturers. Dimensional requirements are below, but Lithonia Lighting recommends a trial installation prior to purchasing project quantities.



SIDE SECTION

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*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

2BLT4R Volumetric Recessed Lighting 2'x4' Relight

A+ Capable options indicated by this color background.

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

Example: 2BLT4R 40L ADP EZ1 LP840

2BLT4R						
Series	**Air Function**	**Lumens[2]**	**Diffuser**	**Voltage**	**Driver**	**Color temperature**
2BLT4R 2X4 BLTR	(blank) Static (white end brackets for troffers) A Air supply/ return or to maintain black reveal (black end brackets for parabolics)[1] F Flanged Brackets	**Standard efficiency (>100 LPW)** 30L 3000 40L 4000 48L 4800 60L 6000 72L 7200 **High efficiency[3] (>130 LPW)** 30LHE 3000 40LHE 4000 48LHE 4800 60LHE 6000 72LHE 7200 85LHE 8500	ADP Curved, linear prisms ADSM Curved, smooth SDP Square, linear prisms SDSM Square, smooth **Diffusers w/ trim rings** ADPT Curved, linear prisms ADSMT Curved, smooth SDPT Square, linear prisms SDSMT Square, smooth	(blank) MVOLT 120 120V 277 277V 347 347V[4,5]	EZ1 eldoLED dims to 1% (0-10 volt dimming) GZ1 Dims to 1% (0-10V dimming)[6] GZ10 Dims to 10% (0-10V dimming)[6] SLD Step-level dimming[7] EOHN On/Off (non-dim)	LP830 82CRI, 3000 K LP835 82CRI, 3500 K LP840 82CRI, 4000 K LP850 82CRI, 5000 K LP930 90CRI, 3000K LP935 90CRI, 3500K LP940 90CRI, 4000K LP950 90CRI, 5000K

nLight Interface	**Control[10]**	**Standby Mode**	**Options**
nLight Wired (blank) no nLight® interface N80 nLight with 80% lumen management N80EMG nLight with 80% lumen management.For use with generator supply EM power[8] N100 nLight without lumen management N100EMG nLight without lumen management. For use with generator supply EM power[8] **nLight Wireless** (blank) no nLight® interface NLTAIR2 nLight AIR Generation 2 enabled[9]	**nLight Wired** (blank) No sensor control NES7 nLight™ nES 7 PIR integral occupancy sensor[11] NESPDT7 nLight™ nES PDT 7 dual technology integral occupancy control[11] NES7ADCX nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell[11] NESPDT7ADCX nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell[11] **nLight Wireless** RES7 nLight AIR PIR integral occupancy sensor with automatic dimming photocell for Networking Capabilities Individual Control RES7PDT nLight AIR microphonics dual technology occupancy sensor with automatic dimming photocell for Zone Control RIO nLight AIR radio module without sensor **Individual Control** MSD7ADCX PIR integral occupancy sensor with automatic dimming control photocell[12] MSDPDT7ADCX PDT integral occupancy sensor with automatic dimming control photocell[12]	NOC Occupancy sensor disabled[13]	EL7L 700 lumen battery pack (Noncompliant with CA T20)[16] EL14L 1400 lumen battery pack (Noncompliant with CA T20)[16] E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, (Certified in CA Title 20 MAEDBS)[15] BGTD Bodine Generator Transfer Device[14] GLR Fast-blowing fuse[15] GMF Slow-blowing fuse[15] NPLT Narrow pallet FAO Field adjustable output[17] USPOM US Point of Manufacture JP16 Job Pack

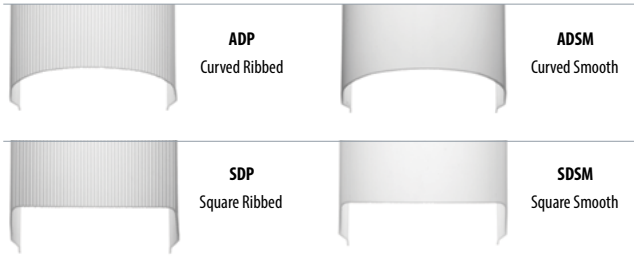
Non-Configurable BLT

Stock	Catalog Description*	UPC	Lumens	Wattage	LPW	Color Temperature	Voltage	Pallet Qty
Stock	2BLT4R 40L ADP LP835	190887550948	3960	32	124	3500K/80 CRI	120-277	26
	2BLT4R 40L ADP LP840	190887550979	4023	32	127	4000K/80 CRI	120-277	26
	2BLT4R 46L ADP LP835	190887550993	4520	38	118	3500K/82 CRI	120-277	26
	2BLT4R 46L ADP LP840	190887551006	4620	38	121	4000K/82 CRI	120-277	26

* Dims to 10%

Notes
1. Consult factory for airflow data.
2. Approximate lumen output.
3. All versions may not achieve 130+ LPW. Refer to photometry on www.acuitybrands.com.
4. Not available with EL7L or EL14L battery packs.
5. 347 not available with SLD.
6. GZ1, GZ10 not available with any Control or Sensor options.
7. Not available with N80, N80EMG, N100, N100EMG, NLTAIR2, or occupancy control.
8. nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
9. Must order with RES7, RES7PDT, or RIO sensor. Only available with EZ1 driver. Not available with 72L, 72LHE, or 85LHE options.
10. Must specify diffuser with trims rings. See sensor options on page 4.
11. Requires N80, N80EMG, N100, or N100EMG.
12. Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate. Not available with Controls options.
13. Can only be ordered in conjunction with EZ1, NLTAIR2, RES7/RES7PDT. Occupancy sensor disabled at factory but can be re-enabled upon commissioning.
14. Requires BSE labeling. Consult factory for options.
15. Must specify voltage, 120 or 277 with GLR & GMF fusing.
16. GZ1 driver not available with battery pack when specifying 72LHE or 85LHE lumen options. Must use EZ1 driver.
17. Consult factory.

Multiple Diffuser Options



Accessories next page

COMMERCIAL INDOOR: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com

Rev. 07/10/19

2BLT4R Volumetric Recessed Lighting 2'x4' Relight

nLight® AIR Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.

Wall switches	Model number
On/Off single pole	rPODB [color] G2
On/Off two pole	rPODB 2P [color] G2
On/Off & raise/lower single pole	rPODB DX [color] G2
On/Off & raise/lower two pole	rPODB 2P DX [color] G2
On/Off & raise/lower single pole	rPODBZ DX WH G2

Application Guide

2BLT4R — Typically used for lensed troffer installations. Assembly contains white end brackets and is supplied with white trim strips for use in closing gaps down fixture sides (installer's choice - not required).

**Note: This kit will fit in Lithonia's Avante non-air fixture.*

2BLT4R A — Typically used for parabolic installations with black reveal. Assembly contains black end brackets to match black reveal around host housing. Does not interfere with host housing air supply/return if present (along fixture sides).

rCMS[1] — **Example: RCMS PDT 10 AR G2**

Series / Detection	Power Supply[1]	Occupancy Detection	Lens (Required)	Operating Mode	Generation
RCMS nLight AIR occupancy and daylight sensor	[blank] Power Supply ordered separately PS 150 Standard 150 mA Power Supply	[blank] PIR Detection PDT[2] Dual Tech PIR/ Microphonics	10 Large Motion/ Extended Range 360° 9 Small Motion/ Extended Range 360° 6 High Bay 360° Lens	[BLANK] None AR Auxiliary Relay	G2 Generation 2 compatibility

Notes
1 RCMS requires low voltage power from either RPP20 DS 24V G2 or PS150.

COMMERCIAL INDOOR: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com

Replacement Parts: *Order as separate catalog number.*

DBLTR48 ADP LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 SDP LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 ADSM LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 SDSM LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 ADPT LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 SDPT LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 ADSMT LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 SDSMT LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 ADPT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 SDPT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 ADSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
DBLTR48 SDSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
U10528A	4 ft. replacement troffer trim strip

COMMERCIAL INDOOR: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com

2BLT4R Volumetric Recessed Lighting 2'x4' Relight

Sensor Options					
Option	Automatic Dimming Photocell	Occupancy Sensing		nLight Wired Networking	nLight AIR Networking
		PIR	PDT		
MSD7ADCX	X	X			
MSDPDT7ADCX	X		X		
NES7		X		X	
NES7ADCX	X	X		X	
NESPDT7			X	X	
NESPDT7ADCX	X		X	X	
RES7	X	X			X
RESPDT7	X	X	X		X

Basic nLight Zone

Integrated Sensor with Individual Control

The MSD7ADCX PIR occupancy sensor/automatic dimming photocell is ideal for areas without obstructions and where daylight harvesting may be desired. Suggested applications include, but not limited to, hallways, corridors, storage rooms, and breakrooms or other areas where people are typically moving.

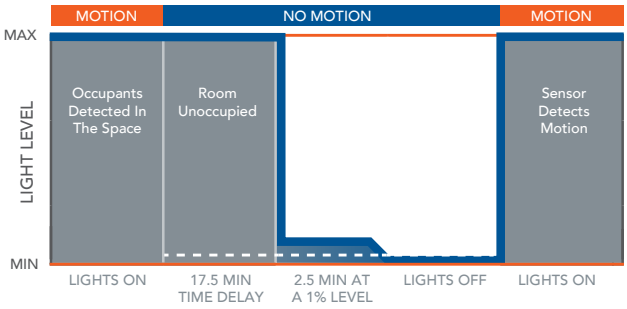
The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

nLight Wired Networking

The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion. Ideal areas include hallways, corridors, storage rooms, and breakrooms. Additionally, the NES7ADCX includes an integrated photocell, which enables daylight harvesting controls.

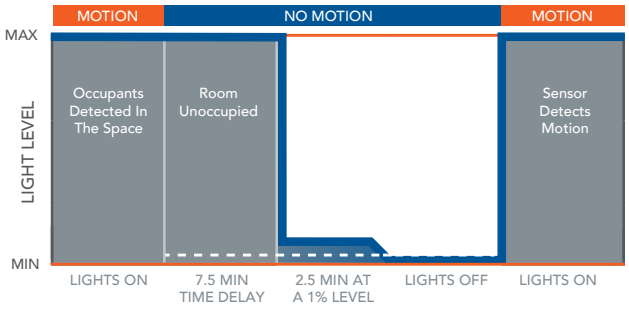
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the NESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

Sequence of Operation



*The presetting on the automatic dimming photocell is 5fc.

Sequence of Operation



*The presetting on the automatic dimming photocell is 5fc.

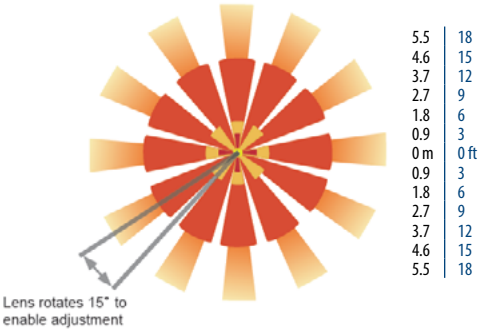
Sensor Coverage Pattern
Mini 360° Lens

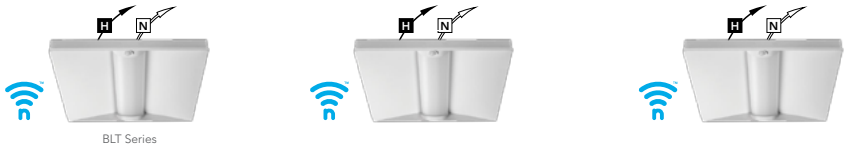
- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and
- 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor

nLight AIR Wireless

nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and costly. nLight AIR is available with or without and integral sensor. The integrated rES 7 or rES7PDT smart sensor is part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application.

9 FT Mounting





BLT Series

Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome

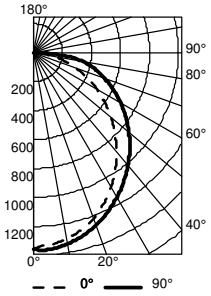
nLight AIR rPODB 2P DX

Mobile Device

2BLT4R Volumetric Recessed Lighting 2'x4' Relight

PHOTOMETRICS

2BLT4R 40L ADP LP835, 3945 delivered lumens, test no. LTL28918P417, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	1356	1356
5°	1330	1361
15°	1269	1309
25°	1147	1212
35°	984	1085
45°	795	938
55°	599	777
65°	407	609
75°	216	437
85°	54	179
90	6	2

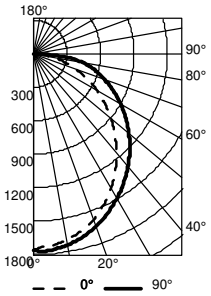
Coefficients of Utilization

	pf	20%								
	pc	80%			70%			50%		
RCR	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
	0	119	119	119	116	116	116	111	111	111
	1	108	103	98	100	96	92	96	92	89
	2	98	89	82	87	80	75	83	78	73
	3	89	78	69	76	68	62	73	66	61
	4	81	69	60	67	59	52	65	57	52
	5	75	61	52	60	52	45	58	50	44
	6	69	55	46	54	46	39	52	45	39
	7	64	50	41	49	41	35	48	40	34
	8	59	46	37	45	37	31	44	36	31
	9	56	42	34	41	33	28	40	33	28
	10	52	39	31	38	30	25	37	30	25

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1037	26.3	26.3
0° - 40°	1686	42.7	42.7
0° - 60°	2970	75.3	75.3
0° - 90°	3947	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3947	100.0	100.0

2BLT4R 48L ADP LP835, 5121 delivered lumens, test no. LTL28918P421, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	1760	1760
5°	1726	1767
15°	1647	1699
25°	1490	1574
35°	1277	1409
45°	1033	1217
55°	778	1008
65°	528	791
75°	280	567
85°	70	232
90	8	3

Coefficients of Utilization

	pf	20%								
	pc	80%			70%			50%		
RCR	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
	0	119	119	119	116	116	116	111	111	111
	1	108	103	98	100	96	92	96	92	89
	2	98	89	82	87	80	75	83	78	73
	3	89	78	69	76	68	62	73	66	61
	4	81	69	60	67	59	52	65	57	52
	5	75	61	52	60	52	45	58	50	44
	6	69	55	46	54	46	39	52	45	39
	7	64	50	41	49	41	35	48	40	34
	8	59	46	37	45	37	31	44	36	31
	9	56	42	34	41	33	28	40	33	28
	10	52	39	31	38	30	25	37	30	25

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1346	26.3	26.3
0° - 40°	2188	42.7	42.7
0° - 60°	3856	75.3	75.3
0° - 90°	5123	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	5123	100.0	100.0

Performance Data			
Lumen Package	**Lumens**	**Input Watts**	**LPW**
30L ADP LP830	2832	23	125
30L ADP LP835	2932	23	129
30L ADP LP840	2979	23	131
30L ADP LP850	3064	23	135
40L ADP LP830	3825	31	123
40L ADP LP835	3960	31	128
40L ADP LP840	4023	31	130
40L ADP LP850	4138	31	134
48L ADP LP830	4743	38	126
48L ADP LP835	4910	38	130
48L ADP LP840	4989	38	133
48L ADP LP850	5131	38	136
60L ADP LP830	5753	46	124
60L ADP LP835	5956	46	128
60L ADP LP840	6051	46	130
60L ADP LP850	6224	46	134
72L ADP LP830	6928	59	118
72L ADP LP835	7173	59	122
72L ADP LP840	7287	59	124
72L ADP LP850	7495	59	128

HE Performance Data			
Lumen Package	**Lumens**	**Input Watts**	**LPW**
30LHE ADP LP830	2971	22	133
30LHE ADP LP835	3076	22	138
30LHE ADP LP840	3125	22	140
30LHE ADP LP850	3214	22	144
40LHE ADP LP830	3906	29	134
40LHE ADP LP835	4044	29	138
40LHE ADP LP840	4109	29	141
40LHE ADP LP850	4226	29	145
48LHE ADP LP830	4561	34	135
48LHE ADP LP835	4722	34	139
48LHE ADP LP840	4798	34	142
48LHE ADP LP850	4935	34	146
60LHE ADP LP830	5636	43	132
60LHE ADP LP835	5835	43	137
60LHE ADP LP840	5928	43	139
60LHE ADP LP850	6098	43	143
72LHE ADP LP830	6836	52	132
72LHE ADP LP835	7078	52	137
72LHE ADP LP840	7191	52	139
72LHE ADP LP850	7396	52	143
85LHE ADP LP830	7801	61	127
85LHE ADP LP835	8076	61	131
85LHE ADP LP840	8205	61	133
85LHE ADP LP850	8440	61	137