Universal's Retrofit Family
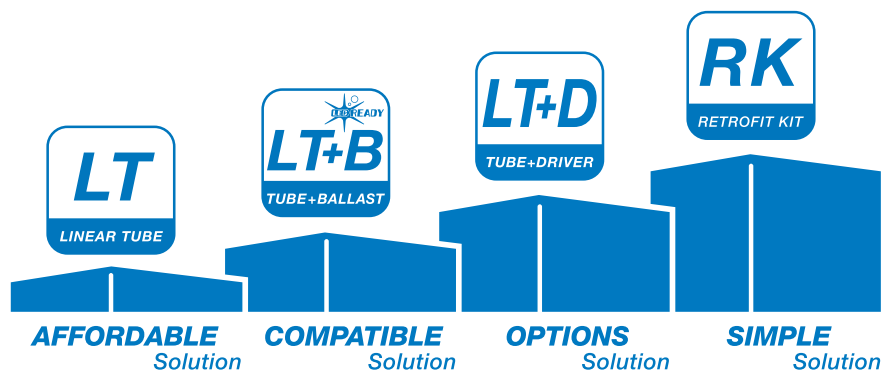# REFERENCE GUIDE

EVER*LINE*®

Universal™
Lighting Technologies

Today there are an estimated
960 MILLION FLUORESCENT LUMINAIRES
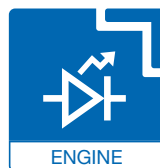## installed in North America.

Retrofits constitute a huge market opportunity, particularly moving traditional fluorescent to more efficient LED technology. The energy savings, low maintenance, and controllability of SSL is appealing to customers, and Universal gives you a variety of options to sell.

We know that over half of all commercial fluorescent lighting fixtures are comprised of recessed troffers. For commercial buildings the energy savings can translate from 15% - 45% savings over conventional systems installed, not to mention the savings from installing a controls scenario.

Universal is committed to servicing this market, and we offer a number of retrofit solutions:

LT LINEAR TUBE	**LT+B** TUBE+BALLAST	**LT+D** TUBE+DRIVER	**RK** RETROFIT KIT
AFFORDABLE Solution	**COMPATIBLE** Solution	**OPTIONS** Solution	**SIMPLE** Solution

As demand for converting existing fluorescent to LED grows, Universal is pleased to offer you traditional simple replacement to sophisticated LED retrofit solutions, including many options in between. We offer standard luminaire LED replacement options from Tubes (Tubes, Tubes + Ballasts), to light engines (e.g. Tubes + Drivers, or LED Retrofit Kits), and even full fixture replacement with a full luminaire line. Universal makes it easy to upgrade to LED technology with reliable performance and our complete in-house design (electronic, thermal and optical) with EVERLINE® "matched" modules and drivers. Every piece of our system is designed to work seamlessly together to provide you with a worry free solution.

CONTROL	ENGINE	OPTICAL

LED REPLACEMENT LUMINAIRES

LED TRADITIONAL RETROFIT SOLUTIONS

Universal™ Lighting Technologies

LED REPLACEMENT LUMINAIRES

VLA
Volumetric, Grid Mount Luminaire

VL
VOLUMETRIC LUMINAIRE

MECHANICAL
- Corrosion and scratch resistant; high reflectivity, post powder coat paint
- Access plate for fast installation
- Integral grid clips and auxiliary suspension points

OPTICAL
- Low loss acrylic center-basket style diffuser

WARRANTY
- Five year limited warranty

ELECTRICAL
- 120-277 VAC, 50/60 Hz
- 0-10V Dimming to 1% is standard

LIGHT ENGINE
Universal Lighting Technologies
- Tuned LED driver & high-efficacy LED modules

CERTIFICATIONS
- ETL Certified for US & Canada application
- Select models (identified below) are DesignLights Consortium® qualified. Consult www.designlights.org/QPL for details.

ORDERING GUIDE

EXAMPLE: VLA24-48W840-U

Ordering Information									
Series	**Format**	**-**	**Watts**	**W**	**CRI**	**Color Temp.**	**-**	**Voltage**	**-**	**Options**
VLA = Recessed, Lay-In, Volumetric Luminaire for 15/16 inch Ceiling Grids	**14** = 1ft x 4ft	-	**48**[1]	**W**	**8** = 80 (minimum)	**30** = 3000K **35** = 3500K **40** = 4000K **50** = 5000K (Nominal)	-	**U** = 120-277 VAC 50/60 Hz	-	**EM** = Backup battery pack **WP** = 6 FT, 3 Wire, whip **C6F**[4] = 6 FT cord set
	22 = 2ft x 2ft	-	**24**[2] **35**[2]							
	24 = 2ft x 4ft	-	**32**[3] **48**[1] **57**[3]							

ORDERING NOTES:
1. 1x4 ft & 2x4 ft only
2. 2x2 ft only
3. 2x4 ft only
4. For use on 120VAC systems only

PERFORMANCE DATA

EXAMPLE: VLA24-48W840-U

Format	Watts		Delivered Lumens	LPW	Input Amps		PF	ThD
	Nominal	**Measured**			**120V**	**277V**		
14	48	48.0	6025	125	0.41	0.18	> 0.90	< 20%
22	24	24.0	3018	125	0.20	0.09	> 0.90	< 20%
	35	35.0	4160	119	0.30	0.13	> 0.90	< 20%
24	32	33.6	4307	134	0.29	0.13	> 0.90	< 20%
	48	48.0	6155	128	0.41	0.18	> 0.90	< 20%
	57	59.0	7212	122	0.50	0.13	> 0.90	< 20%

LUMEN MAINTENANCE	
Reported per TM-21	L75 > 60,000 hrs
Calculated L70	L70 > 85,000 hrs

PERFORMANCE NOTES:
- Nominal delivered lumens data provided for 4000K model at 25°C
- Specifications subject to change without notice
- Multiply by 0.95 for 3000K, 0.97 for 3500K or 1.03 for 5000K.

DESIGNLIGHTS CONSORTIUM® QPL LISTED PRODUCTS

Model Number	Model Number	Model Number	Model Number	Model Number	Model Number
VLA14-48W830-U	VLA22-24W830-U	VLA22-35W830-U	VLA24-32W830-U	VLA24-48W830-U	VLA24-57W830-U
VLA14-48W835-U	VLA22-24W835-U	VLA22-35W835-U	VLA24-32W835-U	VLA24-48W835-U	VLA24-57W835-U
VLA14-48W840-U	VLA22-24W840-U	VLA22-35W840-U	VLA24-32W840-U	VLA24-48W840-U	VLA24-57W840-U
VLA14-48W850-U	VLA22-24W850-U	VLA22-35W850-U	VLA24-32W850-U	VLA24-48W850-U	VLA24-57W850-U

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LED REPLACEMENT LUMINAIRES

GPA
General Purpose Grid Mount Luminaire

GP GENERAL PURPOSE

MECHANICAL
- Corrosion and scratch resistant; high reflectivity, post power coat paint
- Access plate for fast installation
- Integral grid clips and auxiliary suspension points
- Flush steel door hinges from either side

OPTICAL
- Standard 0.100" prismatic lens, others available

WARRANTY
- Five year limited warranty

ELECTRICAL
- 120-277 VAC, 50/60 Hz
- 0-10V Dimming to 1% is standard

LIGHT ENGINE
Universal Lighting Technologies
- Tuned LED driver & high-efficacy LED modules

CERTIFICATIONS
- ETL Certified for US & Canada application
- Select models (identified below) are DesignLights Consortium® qualified. Consult www.designlights.org/QPL for details.

ORDERING GUIDE

EXAMPLE: GPA24-48W840-U

Ordering Information										
Series	Format	-	Watts	W	CRI	Color Temp.	-	Voltage	-	Options
GPA = Recessed, Lay In Luminaire for 15/16-in Ceiling Grids	**14** = 1ft x 4ft	-	**48**[1]	W	**8** = 80 (minimum)	**30** = 3000K **35** = 3500K **40** = 4000K **50** = 5000K (Nominal)	-	**U** = 120-277 VAC 50/60 Hz	-	**L125** = 0.125 inch thick A12 prismatic lens **EM** = Backup battery pack **WP** = 6 FT, 3 Wire, whip **C6F**[5] = 6 FT cord set
	22 = 2ft x 2ft	-	**35**[2] **45**[3]							
	24 = 2ft x 4ft	-	**35**[2] **48**[1] **57**[4]							

ORDERING NOTES:
1. 1x4 ft & 2x4 ft only
2. 2x2 ft & 2x4 ft only
3. 2x2 ft only
4. 2x4 ft only
5. For use on 120VAC systems only

PERFORMANCE DATA

EXAMPLE: GPA24-48W840-U

Format	Watts		Delivered Lumens	LPW	Input Amps		PF	ThD
	Nominal	Measured			120V	277V		
14	48	48.0	4824	101	0.41	0.18	> 0.90	< 20%
22	35	35.0	3591	103	0.30	0.13	> 0.90	< 20%
	45	45.0	4474	99	0.38	0.17	> 0.90	< 20%
24	35	34.7	4346	125	0.30	0.13	> 0.90	< 20%
	48	47.5	5900	124	0.41	0.18	> 0.90	< 20%
	57	55.0	6737	123	0.48	0.22	> 0.90	< 20%

LUMEN MAINTENANCE	
Reported per TM-21	L75 > 60,000 hrs
Calculated L70	L70 > 85,000 hrs

PERFORMANCE NOTES:
- Nominal delivered lumens data provided for 4000K model at 25°C
- Specifications subject to change without notice
- Multiply by 0.95 for 3000K, 0.97 for 3500K or 1.03 for 5000K.

DESIGNLIGHTS CONSORTIUM® QPL LISTED PRODUCTS

Model Number	Model Number	Model Number	Model Number	Model Number
GPA22-35W830-U	GPA22-45W830-U	GPA24-35W830-U	GPA24-48W830-U	GPA24-57W830-U
GPA22-35W835-U	GPA22-45W835-U	GPA24-35W835-U	GPA24-48W835-U	GPA24-57W835-U
GPA22-35W840-U	GPA22-45W840-U	GPA24-35W840-U	GPA24-48W840-U	GPA24-57W840-U
GPA22-35W850-U	GPA22-45W850-U	GPA24-35W850-U	GPA24-48W850-U	GPA24-57W850-U

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LED REPLACEMENT LUMINAIRES

STRP4
4.25 Inch LED Strip Luminaire

Shown with STRP4-ACC-LEN4 lens accessory

SL
STRIP LUMINAIRE

MECHANICAL
- Die-formed, cold-rolled steel with high-reflectance, baked enamel finish.
- End plate doubles as a coupler/alignment device for continuous row mounting applications
- Diffuse, acrylic lens available as an accessory

APPLICATION
- For use in indoor, non-condensing & non-corrosive environments
- Warehouses, factories, utility areas, etc.

WARRANTY
- Five year limited warranty

ELECTRICAL
- 120-277 VAC, 50/60 Hz
- 0-10V Dimming to 1% is standard

LIGHT ENGINE
Universal Lighting Technologies
- Tuned LED driver & high-efficacy LED modules

CERTIFICATIONS
- ETL Certified for US & Canada application
- Select models (identified below) are DesignLights Consortium® qualified. Consult www.designlights.org/QPL for details.

ORDERING GUIDE

EXAMPLE: STRP448-48W840-U

Ordering Information

Series	Format	-	Watts	W	CRI	Color Temp.	-	Voltage	-	Options
STRP4 = 4.25 Inch, Strip Style Luminaire	**24 in**	-	18[1] 24[4] 28[1]	**W**	**8** = 80 (minimum)	**30** = 3000K **35** = 3500K **40** = 4000K **50** = 5000K (Nominal)	-	**U** = 120-277 VAC 50/60 Hz	-	**LNPL**[7] = Lens plates (longer end plates to accommodate a separately purchased lens) **WP** = 6 FT, 3 Wire, whip **C6F**[6] = 6 FT cord set **EM**[5] = Backup battery pack
	48 in	-	24[4] 35[2] 48[5] 57[2]							
	96 in	-	48[5] 70[3] 97[3] 114[3]							

ORDERING NOTES:
1. 24 inch length only
2. 48 inch length only
3. 96 inch length only
4. 24 & 48 inch lengths only
5. 48 & 96 inch lengths only
6. For use on 120VAC systems only
7. Fixtures with the LNPL option do not come equipped with standard end plates (which can used for alignment). For continuous row mounting of fixtures with lenses, order standard fixtures, matching lenses (see below) and as many STRP4-ACC-LNPL accessories (see below) as needed to finish the rows.

PERFORMANCE DATA

EXAMPLE: STRP448-48W840-U

Format	Watts		Delivered Lumens	LPW	Input Amps		PF	ThD
	Nominal	Measured			120V	277V		
24 in	18	18.6	2,590	139	0.16	0.07	> 0.90	< 20%
	24	24.0	3,355	140	0.20	0.09	> 0.90	< 20%
	28	28.0	3,705	132	0.24	0.11	> 0.90	< 20%
48 in	24	23.9	3,475	145	0.20	0.09	> 0.90	< 20%
	35	35.0	4,920	141	0.30	0.13	> 0.90	< 20%
	48	48.0	6,475	135	0.41	0.18	> 0.90	< 20%
	57	59.0	7,755	131	0.50	0.23	> 0.90	< 20%
96 in.	48	48.0	6,475	135	0.41	0.18	> 0.90	< 20%
	70	70.0	9,840	141	0.60	0.27	> 0.90	< 20%
	97	97.0	12,950	134	0.82	0.37	> 0.90	< 20%
	114	117.7	15,510	131	1.00	0.45	> 0.90	< 20%

ACCESSORIES

STRP4-ACC-WG4	4-Ft Wire guard
STRP4-ACC-LEN2	2-Ft Lens
STRP4-ACC-LEN4	4-Ft Lens
STRP4-ACC-LEN8	8-Ft Lens
STRP4-ACC-PNDKIT	2ps V-Hook & 2pc 2-Ft Chain
STRP4-ACC-LNPL	2pc Lens plates

LUMEN MAINTENANCE

Reported per TM-21	L75 > 60,000 hrs
Calculated L70	L70 > 85,000 hrs

PERFORMANCE NOTES:
- Nominal delivered lumens data provided for 4000K model at 25°C
- Multiply Delivered Lumens & LPW by 0.95 for 3000K, 0.97 for 3500K or 1.03 for 5000K.
- Multiply Delivered Lumens & LPW by 0.90 when used with lens
- Specifications subject to change without notice

DESIGNLIGHTS CONSORTIUM® QPL LISTED PRODUCTS

DLC QPL LISTED

Model Number	Model Number	Model Number	Model Number	Model Number
STRP424-24W830-U*	STRP448-24W830-U**	STRP448-48W830-U**	STRP496-48W830-U***	STRP496-97W830-U***
STRP424-24W835-U*	STRP448-24W835-U**	STRP448-48W835-U**	STRP496-48W835-U***	STRP496-97W835-U***
STRP424-24W840-U*	STRP448-24W840-U**	STRP448-48W840-U**	STRP496-48W840-U***	STRP496-97W840-U***
STRP424-24W850-U*	STRP448-24W850-U**	STRP448-48W850-U**	STRP496-48W850-U***	STRP496-97W850-U***

Model Number	Model Number	Model Number	Model Number	Model Number	Model Number
STRP424-18W830-U*	STRP424-28W830-U*	STRP448-35W830-U**	STRP448-57W830-U**	STRP496-70W830-U***	STRP496-114W830-U***
STRP424-18W835-U*	STRP424-28W835-U*	STRP448-35W835-U**	STRP448-57W835-U**	STRP496-70W835-U***	STRP496-114W835-U***
STRP424-18W840-U*	STRP424-28W840-U*	STRP448-35W840-U**	STRP448-57W840-U**	STRP496-70W840-U***	STRP496-114W840-U***
STRP424-18W850-U*	STRP424-28W850-U*	STRP448-35W850-U**	STRP448-57W850-U**	STRP496-70W850-U***	STRP496-114W850-U***

Universal™ Lighting Technologies

LED REPLACEMENT LUMINAIRES

WRP9
9 Inch Wraparound Luminaire

MECHANICAL
- Corrosion and scratch resistant; high reflectivity, post power coat paint
- Surface, stem or chain mounted
- For use in indoor, non-condensing & non-corrosive environments

OPTICAL
- Acrylic, prismatic diffuser with ribbed linear sides
- Hinges from either side; self-aligning

WARRANTY
- Five year limited warranty

ELECTRICAL
- 120-277 VAC, 50/60 Hz
- 0-10V Dimming to 1% is standard

LIGHT ENGINE
Universal Lighting Technologies
- Tuned LED driver & high-efficacy LED modules

CERTIFICATIONS
- ETL Certified for US & Canada application
- Select models (identified below) are DesignLights Consortium® qualified. Consult www.designlights.org/QPL for details.

ORDERING GUIDE

EXAMPLE: WRP948-48W840-U

Ordering Information										
Series	**Length**	**-**	**Watts**	**W**	**CRI**	**Color Temp.**	**-**	**Voltage**	**-**	**Options**
WRP9 = Surface Mount, 9-Inch, Wraparound Luminaire	**24 in**	-	**28**[1]	**W**	**8** = 80 (minimum)	**30** = 3000K **35** = 3500K **40** = 4000K **50** = 5000K (Nominal)	-	**U** = 120-277 VAC 50/60 Hz	-	**WP** = 6 FT, 3 Wire, whip **C6F**[3] = 6 FT cord set
	48 in	-	**48**[2] **56**[2]							

ORDERING NOTES:
1. 24 inch length only
2. 48 inch lengths only
3. For use on 120VAC systems only

PERFORMANCE DATA

EXAMPLE: WRP948-48W840-U

Length	Watts		Delivered Lumens	LPW	Input Amps		PF	ThD
	Nominal	**Measured**			**120V**	**277V**		
24 in	28	28.0	2950	105	0.24	0.11	> 0.90	< 20%
48 in	48	48.0	5107	106	0.41	0.18	> 0.90	< 20%
	56	56.0	6019	107	0.48	0.48	> 0.90	< 20%

LUMEN MAINTENANCE	
Reported per TM-21	L75 > 60,000 hrs
Calculated L70	L70 > 85,000 hrs

PERFORMANCE NOTES:
- Nominal delivered lumens data provided for 4000K model at 25°C
- Specifications subject to change without notice
- Multiply by 0.95 for 3000K, 0.97 for 3500K or 1.03 for 5000K.

DESIGNLIGHTS CONSORTIUM® QPL LISTED PRODUCTS

Model Number	Model Number
WRP948-48W830-U	WRP948-56W830-U
WRP948-48W835-U	WRP948-56W835-U
WRP948-48W840-U	WRP948-56W840-U
WRP948-48W850-U	WRP948-56W850-U

LED REPLACEMENT LUMINAIRES

BLC48
4FT LED Linear High Bay Luminaire

IB
INDUSTRIAL BAY

MECHANICAL
- Die-formed, cold-rolled steel with high-reflectance, baked enamel finish.
- Suitable for pendant mounting with chains or cables
- Diffuse, acrylic lens available as an accessory

APPLICATION
- For use in indoor, non-condensing & non-corrosive environments
- Warehouses, factories, utility areas, etc.

WARRANTY
- Five year limited warranty

ELECTRICAL
- 120-277 or 347-480 VAC, 50/60 Hz 6kV Surge Rating
- 0-10V Dimming to 1% is standard

LIGHT ENGINE
Universal Lighting Technologies
- Tuned LED driver & high-efficacy LED modules

CERTIFICATIONS
- CSA Certified fir US & Canada application
- Select models (identified below) are DesignLights Consortium® qualified.
  Consult www.designlights.org/QPL for details.

ORDERING GUIDE
EXAMPLE: BLC48-65W850-U

Ordering Information										
Series	**Length**	**-**	**Watts (nom.)**	**W**	**CRI**	**Color Temp.**	**-**	**Voltage**	**-**	**Options**
BLC48 = 4FT LED Linear High Bay Luminaire	**48 in**	-	65 90 130 180	**W**	**8** = 80 (minimum)	**30** = 3000K **35** = 3500K **40** = 4000K **50** = 5000K (Nominal)	-	**U** = 120-277 VAC 50/60 Hz **HRV** = 347-480 VAC, 50/60 Hz	-	**EM**[1] = 10W battery backup **WP6** = 6ft Whip **WP12** =12ft Whip

[1]EM option available on UNV (120-277V) versions only

PERFORMANCE DATA
EXAMPLE: BLC48-65W840-U

Model	Watts (nom.)	U (120-277V)					HRV (347-480V)					PF	ThD
		Delivered Lumens	Watts	LPW	Input Amps		Delivered Lumens	Watts	LPW	Input Amps			
					120V	277V				347V	480V		
BLC48-65W8xx-U BLC48-65W8xx-HRV	65	9,916	62.21	159	0.52	0.23	10,059	64.88	155	0.20	0.15	> 0.90	< 20%
BLC48-90W8xx-U BLC48-90W8xx-HRV	90	13,678	88.97	153	0.75	0.33	13,688	91.13	150	0.28	0.21	> 0.90	< 20%
BLC48-130W8xx-U BLC48-130W8xx-HRV	130	18,700	128.3	147	1.08	0.48	18,890	132.5	142	0.40	0.30	> 0.90	< 20%
BLC48-180W8xx-U BLC48-180W8xx-HRV	180	26,391	178.7	147	1.50	0.67	26,830	180.4	148	0.55	0.41	> 0.90	< 20%

PERFORMANCE NOTES:
- Delivered lumens and LPW data provided for the 4000K model at 25°C
- Multiply delivered lumens and LPW by 0.9439 for 3000K or 3500K, or by 1.0103 for 5000K
- Multiply delivered lumens and LPW by 0.939 when used with the BLC48-ACC-LEN48X16 or BLC48-ACC-LEN48X11 lens accessory
- Specifications subject to change without notice

ACCESSORIES (Sold separately and intended for field installation)	
BLC48-ACC-PNDKIT06	6ft Chain & V-Tong (1 pair)
BLC48-ACC-CBLKIT15	15ft Adj. cable mount (1 pair)
BLC48-ACC-WG48X16	Wire guard for 48X16 in BLC Housing (180W models)
BLC48-ACC-WG48X11	Wire guard for 48X11 in BLC Housing (65W, 90W & 130W models)
BLC48-ACC-LEN48X16	Wraparound lens for 48X16 in BLC Housing (180W models)
BLC48-ACC-LEN48X11	Wraparound lens for 48X11 in BLC Housing (65W, 90W & 130W models)

LUMEN MAINTENANCE	
Reported per LM	L70 > 60,000 hrs
Calculated LM at 50°C	L70 > 110,000 hrs
	L85 > 50,000 hrs

Ambient Operating Temperature		
Watts (nom.)	**UNV**	**HRV**
65W, 90W 130W	50°C	49°C
180W	48°C	45°C

For UNV models, reduce by 6°C when using a lens
For HRV models, reduce by 5°C when using a lens

DESIGNLIGHTS CONSORTIUM® QPL LISTED PRODUCTS

Model Number	Model Number	Model Number	Model Number
BLC48-65W830-U	BLC48-90W830-U	BLC48-160W830-U	BLC48-180W830-U
BLC48-65W835-U	BLC48-90W835-U	BLC48-160W835-U	BLC48-180W835-U
BLC48-65W840-U	BLC48-90W840-U	BLC48-160W840-U	BLC48-180W840-U
BLC48-65W850-U	BLC48-90W850-U	BLC48-160W850-U	BLC48-180W850-U

Model Number	Model Number	Model Number	Model Number
BLC48-65W830-HRV	BLC48-90W830-HRV	BLC48-160W830-HRV	BLC48-180W830-HRV
BLC48-65W835-HRV	BLC48-90W835-HRV	BLC48-160W835-HRV	BLC48-180W835-HRV
BLC48-65W840-HRV	BLC48-90W840-HRV	BLC48-160W840-HRV	BLC48-180W840-HRV
BLC48-65W850-HRV	BLC48-90W850-HRV	BLC48-160W850-HRV	BLC48-180W850-HRV

DLC QPL LISTED

Universal™
Lighting Technologies

LED REPLACEMENT LUMINAIRES

WPL13
13" LED Wall-Pack

WP WALL PACK

MECHANICAL
- Painted, die cast aluminum frame
- Polyester powder coat finish
- One piece continuous silicone gasket
- Mounts to standard 4" junction box

OPTICAL
- Acrylic or polycarbonate lens with continuous gasket
- Type IV distribution
- Optional full cutoff shield accessory (ordered separately)
- 80 CRI (min.), 4000K or 5000K CCT
- Excellent lumen maintenance, L70 >140,000 hrs

WARRANTY
- Five year limited warranty

ELECTRICAL
- 120-277VAC, 50/60Hz
- Wiring access through back of frame or through the top via surface mounted conduit
- Options include dedicated voltage 120V or 277V photocells

CERTIFICATIONS
- ETL Listed to UL 1598 for US and Canadian applications
- IP66 rated, suitable for wet locations
- RoHS compliant, contains no lead or mercury
- Select models (identified below) are DesignLights Consortium™ qualified.
  Consult www.designlights.org/QPL for more details.

ORDERING GUIDE

EXAMPLE: WPL13-23L840-U-PCBZ

Series	Size	–	Nominal Lumens	CRI	Color Temp.	–	Voltage	–	Lens	Finish	Options
WPL = Wall Pack Luminaire	**13** = 13 in	–	**10L** = 1,000 **23L** = 2,300 **33L** = 3,300	**8** = 82 (nominal)	**40** = 4000K **50** = 5000K	–	**U** = 120-277V *50/60Hz*	–	**(Blank)** = Acrylic, 50% DR **PC** = Polycarbonate	**BZ** = Dark Bronze	**DS1**[1] = 120V Photocell **DS2**[2] = 277V Photocell

ORDERING NOTES
1. Suitable for 120V supply only.
2. Suitable for 277V supply only.

Accessories (Order Separately)
WCS13-BZ = Full cutoff shield

DesignLights Consortium™ QPL Listed Products

Model Number	Model Number	Model Number
WPL13-10L840-U-BZ	WPL13-23L840-U-BZ	WPL13-33L840-U-BZ
WPL13-10L840-U-PCBZ	WPL13-23L840-U-PCBZ	WPL13-33L840-U-PCBZ
WPL13-10L850-U-BZ	WPL13-23L850-U-BZ	WPL13-33L850-U-BZ
WPL13-10L850-U-PCBZ	WPL13-23L850-U-PCBZ	WPL13-33L850-U-PCBZ

DLC QPL LISTED

PERFORMANCE DATA

	ELECTRICAL DATA				WITH WCS13-BZ SHIELD					WITHOUT WCS13-BZ SHIELD				
Light Engine	LED Drive Current	Input Power	Input Current		Delivered Lumens	LPW	B	U	G	Delivered Lumens	LPW	B	U	G
			@ 120V	@ 277V										
10L	350 mA	9.4 W	0.079 A	0.041 A	827	88	0	1	1	919	98	0	3	1
23L	620 mA	21.2 W	0.178 A	0.082 A	2028	96	1	1	1	2253	106	1	3	2
33L	1050 mA	35.2 W	0.296 A	0.141 A	3020	86	1	1	1	3355	95	1	3	3

- All data is subject to change without notice
- Performance data taken with a 25°C ambient, 4000K CCT and a polycarbonate lens
- Multiply lumens and efficacy by 1.03 for 5000K CCT and/or 1.1 for acrylic lens

- Performance data obtained from photometric tests in accordance with IES LM-79-08 by a NVLAP accreditied testing laboratory. Data is representative of the configurations shown. Actual performace may differ for various end user environments and applications.
- Consult factory for photometry.

Universal™ Lighting Technologies

LED REPLACEMENT LUMINAIRES

VTL4
4' LED Vapor Tight

MECHANICAL
- Gasketed white fiberglass housing
- White enamel painted steel gear tray
- (6) White plastic molded retaining latches
- (2) Stainless steel mounting brackets

OPTICAL
- Acrylic thermal formed lens, 15% DR, 100% frost
- 85 CRI (nom.); 3500K, 4000K, 5000K CCT
- Excellent lumen maintenance

WARRANTY
- Five year limited warranty

ELECTRICAL
- Available as 120-277VAC or 347VAC
- 0-10V Dimming to 10%
- Housing includes (2) 7/8" end holes

CERTIFICATIONS
- UL Listed to US & Canadian UL 1598
- Suitable for wet locations
- IP65 rated for covered outdoor use
- RoHS compliant, contains no mercury or lead
- Select models (identified below) are DesignLights Consortium™ qualified. Consult www.designlights.org/QPL for details.

ORDERING GUIDE

EXAMPLE: VTL4-40L840-U

Series	Size	–	Nominal Lumens	CRI (nom.)	Color Temp.	–	Voltage	Options
VTL = LED Vapor Tight Luminaire	**4** = 4ft	–	**33L** = 3,300 **40L** = 4,000 **5K** = 5,000 **6K** = 6,000 **8K** = 8,000 **10K**[1] = 10,000	**8** = 85 (nom.)	**35** = 3,500K **40** = 4,000K **50** = 5,000K	–	**U** = 120-277V **347** = 347V	**SSL** = Stainless steel latches **SSLTR** = Tamper resistant stainless steel latches

ORDERING NOTES:

1. 10K Light engine modules rated for max 35°C

Accessories (Order Separately)
VTA-DCFIT-1/2 = 7/8" Aluminum die cast fitting - 1/2" rigid conduit (pack of 2)
VTA-TRBIT-SE8 = Tamper resistant driver bit - snake eyes #8

DesignLights Consortium™ QPL Listed Products

Model Number	Model Number	Model Number	Model Number	Model Number
VTL4-33L835-U	VTL4-5K835-U	VTL4-8K835-U	VTL4-40L835-347	VTL4-10K835-347
VTL4-33L840-U	VTL4-5K840-U	VTL4-8K840-U	VTL4-40L840-347	VTL4-10K840-347
VTL4-33L850-U	VTL4-5K850-U	VTL4-8K850-U	VTL4-40L850-347	VTL4-10K850-347
VTL4-40L835-U	VTL4-6K835-U	VTL4-10K835-U	VTL4-5K835-347	
VTL4-40L840-U	VTL4-6K840-U	VTL4-10K840-U	VTL4-5K840-347	
VTL4-40L850-U	VTL4-6K850-U	VTL4-10K850-U	VTL4-5K850-347	

DLC QPL LISTED

Model Number	Model Number
VTL4-33L835-347	VTL4-8K835-347
VTL4-33L840-347	VTL4-8K840-347
VTL4-33L850-347	VTL4-8K850-347
VTL4-6K835-347	
VTL4-6K840-347	
VTL4-6K850-347	

DLC QPL LISTED PREMIUM

PERFORMANCE DATA

Light Engine	Input Power	Input Current @ 120V	Input Current @ 277V	Input Current @ 347V	Delivered Lumens	LPW	Spacing Criterion
33L	39 watt	0.32 A	0.14 A	0.11A	4,758 lumen	122	1.22
40L	52 watt	0.43 A	0.19 A	0.15A	5,873 lumen	113	1.22
5K	49 watt	0.41 A	0.18 A	0.14A	6,606 lumen	135	1.24
6K	58 watt	0.48 A	0.21 A	0.17A	7,787 lumen	134	1.24
8K	87 watt	0.72 A	0.31 A	0.25A	10,697 lumen	123	1.24
10K	107 watt	0.89 A	0.38 A	0.30A	13,530 lumen	126	1.24

- Performance data provided at 4000K CCT, multiply lumens and LPW by 1.06 for 5000K or 0.93 for 3500K
- Specifications subject to change without notice
- Performance data obtained from photometric tests in accordance with IES LM-79-08 by a NVLAP accredited testing lab
- Consult factory for photometry

NSF

Universal™
Lighting Technologies

LED REPLACEMENT LUMINAIRES

VTL8
8' LED Vapor Tight

VT
VAPOR TIGHT

MECHANICAL
- Gasketed white fiberglass housing
- White enamel painted steel gear tray
- (12) White plastic molded retaining latches
- (4) Stainless steel mounting brackets

OPTICAL
- Acrylic thermal formed lens, 15% DR, 100% frost
- 85 CRI (nom.); 3500K, 4000K, 5000K CCT
- Excellent lumen maintenance

WARRANTY
- Five year limited warranty

ELECTRICAL
- Available as 120-277VAC or 347VAC
- 0-10V Dimming to 10%
- Housing includes (2) 7/8" end holes

CERTIFICATIONS
- UL Listed to US & Canadian UL 1598
- Suitable for wet locations
- IP65 rated for covered outdoor use
- RoHS compliant, contains no mercury or lead
- Select models (identified below) are DesignLights Consortium™ qualified. Consult www.designlights.org/QPL for details.

ORDERING GUIDE

EXAMPLE: VTL8-7K840-U

Series	Size	–	Nominal Lumens	CRI (nom.)	Color Temp.	–	Voltage	Options
VTL = LED Vapor Tight Luminaire	**8** = 8ft	–	**7K** = 7,000 **8K** = 8,000 **10K** = 10,000 **12K** = 12,000 **16K** = 16,000 **20K**[1] = 20,000	**8** = 85 (nom.)	**35** = 3,500K **40** = 4,000K **50** = 5,000K	–	**U** = 120-277V **347** = 347V	**SSL** = Stainless steel latches **SSLTR** = Tamper resistant stainless steel latches

ORDERING NOTES:
1. 20K Light engine modules rated for max 35°C

Accessories (Order Separately)
VTA-DCFIT-1/2 = 7/8" Aluminum die cast fitting - 1/2" rigid conduit (pack of 2)
VTA-TRBIT-SE8 = Tamper resistant driver bit - snake eyes #8

DesignLights Consortium™ QPL Listed Products

Model Number	Model Number	Model Number	Model Number	Model Number	Model Number
VTL8-7K835-U	VTL8-10K835-U	VTL8-16K835-U	VTL8-7K835-347	VTL8-10K835-347	VTL8-20K835-347
VTL8-7K840-U	VTL8-10K840-U	VTL8-16K840-U	VTL8-7K840-347	VTL8-10K840-347	VTL8-20K840-347
VTL8-7K850-U	VTL8-10K850-U	VTL8-16K850-U	VTL8-7K850-347	VTL8-10K850-347	VTL8-20K850-347
VTL8-8K835-U	VTL8-12K835-U	VTL8-20K835-U	VTL8-8K835-347	VTL8-16K835-347	
VTL8-8K840-U	VTL8-12K840-U	VTL8-20K840-U	VTL8-8K840-347	VTL8-16K840-347	
VTL8-8K850-U	VTL8-12K850-U	VTL8-20K850-U	VTL8-8K850-347	VTL8-16K850-347	

DLC QPL LISTED

Model Number
VTL8-12K835-347
VTL8-12K840-347
VTL8-12K850-347

DLC QPL LISTED PREMIUM

PERFORMANCE DATA

Light Engine	Input Power	Input Current			Delivered Lumens	LPW
		@ 120V	@ 277V	@ 347V		
7K	77 watt	0.64 A	0.28 A	0.22 A	10,136 lumen	132
8K	102 watt	0.85 A	0.37 A	0.29 A	12,198 lumen	120
10K	98 watt	0.82 A	0.35 A	0.28 A	13,110 lumen	134
12K	118 watt	0.98 A	0.43 A	0.34 A	15,637 lumen	132
16K	168 watt	1.4 A	0.61 A	0.48 A	20,720 lumen	123
20K	215 watt	1.78 A	0.78 A	0.62 A	26,861 lumen	125

- Performance data provided at 4000K CCT, multiply lumens and LPW by 1.05 for 5000K on 0.95 for 3500K
- Specifications subject to change without notice
- Performance data obtained from photometric tests in accordance with IES LM-79-08 by a NVLAP accredited testing lab
- Consult factory for photometry

NSF

Universal™ Lighting Technologies

LED TRADITIONAL RETROFIT SOLUTIONS

Linear T8 LED
Replacement Lamps

LT — LINEAR TUBE

FEATURES

- 4': 1800 & 2200 lumen options
- High Efficiency operation
- Beam Angle: 240°
- Compatible with most T8 electronic ballasts, 120-277V and 347V
- No warm-up time, instant on
- Long Life: 50,000 hours (L70)
- No fixture rewiring required
- Glass construction for optimum optical efficiency.

- Reduces energy by up to 40%
- Full light down to -4°F
- RoHs Compliant – Mercury Free
- No UV emissions
- 5 Year limited lamp warranty
- Ideal for frequent on/off switching
- Compatible with Emergency Ballasts

RoHS COMPLIANT

DLC QPL LISTED

c(UL)us LISTED

ORDERING GUIDE

Ordering Information										
Model Number	Ordering Code	Length	Base	CRI	CCT	Lumens	Beam Angle	Pkg Qty	DLC	UPC Code
T8LDR2F8/835B	T8LDR2F8/835B25C	24"	G13	82	3500	1250	240°	25	Y	768386623045
T8LDR2F8/840B	T8LDR2F8/840B25C	24"	G13	82	4000	1250	240°	25	Y	768386623052
T8LDR2F8/850B	T8LDR2F8/850B25C	24"	G13	82	5000	1250	240°	25	Y	768386623069
T8LDR3F11/835	T8LDR3F11/835A25C	36"	G13	82	3500	1450	240°	25	N/A	768386612384
T8LDR3F11/840	T8LDR3F11/840A25C	36"	G13	82	4000	1450	240°	25	N/A	768386612391
T8LDR4F15/835B	T8LDR4F15/835B25C	48"	G13	82	3500	2200	240°	25	Y	768386623106
T8LDR4F15/840B	T8LDR4F15/840B25C	48"	G13	82	4000	2200	240°	25	Y	768386623113
T8LDR4F15/850B	T8LDR4F15/850B25C	48"	G13	82	5000	2200	240°	25	Y	768386623120
T8LDR4F11/835B	T8LDR4F11/835B25C	48"	G13	82	3500	1750	240°	25	Y	768386623076
T8LDR4F11/840B	T8LDR4F11/840B25C	48"	G13	82	4000	1800	240°	25	Y	768386623083
T8LDR4F11/850B	T8LDR4F11/850B25C	48"	G13	82	5000	1800	240°	25	Y	768386623090
T8LDR6U12/835B	T8LDR6U12/840B12C	U-22"	G13	82	3500	1700	240°	12	Y	76836651314
T8LDR6U12/840B	T8LDR6U12/840B12C	U-22"	G13	82	4000	1800	240°	12	Y	76836651321

- Lumens are nominal lumens with a .88 ballast factor ballast
* DLC does not offer a certification for 3ft LED tubes

ADDITIONAL SPECIFICATIONS

Lamp Type:	Linear T8 + U-Bend
Bulb:	T8
Base:	Medium Bi-Pin (G13)
Color Rendering Index (CRI)	82
Rated Life:	L70 @ 50000 hours

Ambient Temperature	-4°F to 113°F
Beam Angle	240°
EMI/RFI	FCC Part 18 - Non-Consumer
Warranty *(Ballast Factor 1.0 and lower)*	5 years
Warranty *(Ballast Factor greater than 1.0)*	4 years

PERFORMANCE DATA

Average System Performance		Bare Lamp Data		Watts/Lamp Ballast Factor			Lumens/Lamp Ballast Factor		
Description	Model Number	Power (Watts)	Efficacy (lm/W)	LBF (.77)	NBF (.88)	HBF (1.18)	LBF (.77)	NBF (.88)	HBF (1.18)
T8LED 8W 1250LM 2FT	T8LDR2F8/8xxB	8	156	9.3	10.4	14.3	1125	1250	1625
T8LED 15W 2200LM 4FT	T8LDR4F15/8xxB	15.0	146	15.8	17.5	24.1	1980	2200	2840
T8LED 11W 1800LM 4FT	T8LDR4F11/8xxB	11.5	156	12.5	13.9	20.4	1620	1800	2330
U-Bend 12W 1800LM 4FT	T8LDR6U12/8xxB	12.0	142	14	16	22	1500	1800	2400

- xx represents CCT, xx=35 is 3500K, xx=40 is 4000K, xx=50 is 5000K
- Average performance per lamp based on 4000K
- Performance will vary based on lamp quantity and actual ballast used
- Bare Lamp data is based on use with a .88 ballast factor ballast

Universal Lighting Technologies

T5HO LED
Replacement Lamps

FEATURES

- High Efficiency operation
- Beam Angle: 240°
- Compatible with most F54T5HO electronic ballasts, 120-277V and 347V
- No warm-up time, instant on
- Long Life: 50,000 hours (L70)
- No fixture rewiring required
- Glass construction for optimum optical efficiency.
- Shatter proof coating

- Reduces energy by up to 40%
- Full light down to -4°F
- RoHs Compliant – Mercury Free
- No UV emissions
- 5 Year limited lamp warranty
- Ideal for frequent on/off switching

ORDERING GUIDE

Ordering Information										
Model Number	Ordering Code	Length	Base	CRI	CCT	Lumens	Beam Angle	Pkg Qty	DLC	UPC Code
T5LDR4F25/840A	T5LDR4F25/840A25C	45"	G5	82	4000	3300	240°	25	Y	768386612407
T5LDR4F25/850A	T5LDR4F25/850A25C	45"	G5	82	5000	3400	240°	25	Y	768386612414

- Lumens are nominal lumens with a 1.00 ballast factor ballast

ADDITIONAL SPECIFICATIONS

Lamp Type:	Linear T5HO
Bulb:	Miniature T5
Base:	Bi-Pin (G5)
Color Rendering Index (CRI)	82
Rated Life:	L70 @ 50000 hours

Ambient Temperature	-4°F to 113°F
Beam Angle	240°
EMI/RFI	FCC Part 18 - Non-Consumer
Warranty (Ballast Factor 1.0 and lower)	5 years

PERFORMANCE DATA

Average System Performance		Bare Lamp Data		Watts/Lamp (1.00 Ballast Factor)	Lumens/Lamp (1.00 Ballast Factor)
Description	Model Number	Power (Watts)	Efficacy (lm/W)		
T5LED 25.5W, 3400LM 4FT	T5LDR4F25/8xxA	25.5	133.3	28.5	3400

- xx represents CCT, xx=40 is 4000K, xx=50 is 5000K
- Average performance per lamp
- Performance will vary based on lamp quantity and actual ballast used
- Bare Lamp data is based on use with a 1.00 ballast factor ballast

Universal™
Lighting Technologies

LED TRADITIONAL RETROFIT SOLUTIONS

AC Direct T8 LED
Integral Driver

FEATURES

- Integral Driver, Bypasses ballast
- Universal input voltage 120-277VAC
- Double ended input
  - Reduces installation costs
  - Shunted or Non-shunted
- 4' 1800 & 2200 lumen options
- High Efficiency operation, up to 150 lm/W
  - Standard and Premium options
- Long Life: 50,000 hours L70
- Glass construction for optimum optical efficiency

- Full light output down to -4°F
- RoHS Compliant - Mercury Free
- No UV Emissions
- 5 Year limited lamp warranty
- UL Classified 1598C for US and Canada

RoHS COMPLIANT

DLC QPL LISTED

c **UL** US

ORDERING GUIDE

Standard

Model Number	Ordering Code	Length	Lumens	Power (W)	Efficacy (lm/W)	CCT	Beam Angle	Pkg Qty	DLC	UPC Code
T8LACD2F9/835B	T8LACD2F9/835B25C	24"				3500			Y	768386645115
T8LACD2F9/840B	T8LACD2F9/840B25C	24"	1050	9	117	4000	240°	25	Y	768386645122
T8LACD2F9/850B	T8LACD2F9/850B25C	24"				5000			Y	768386645139
T8LACD4F14/835B	T8LACD4F14/835B25C	48"				3500			Y	768386623137
T8LACD4F14/840B	T8LACD4F14/840B25C	48"	1800	14	129	4000	240°	25	Y	768386623144
T8LACD4F14/850B	T8LACD4F14/850B25C	48"				5000			Y	768386623151
T8LACD4F17/835B	T8LACD4F17/835B25C	48"				3500			Y	768386623168
T8LACD4F17/840B	T8LACD4F17/840B25C	48"	2200	17	129	4000	240°	25	Y	768386623175
T8LACD4F17/850B	T8LACD4F17/850B25C	48"				5000			Y	768386623182

Premium

Model Number	Ordering Code	Length	Lumens	Power (W)	Efficacy (lm/W)	CCT	Beam Angle	Pkg Qty	DLC	UPC Code
T8LACD4F12/835B	T8LACD4F12/835B25C	48"				3500			Y	768386645054
T8LACD4F12/840B	T8LACD4F12/840B25C	48"	1800	12	150	4000	240°	25	Y	768386645061
T8LACD4F12/850B	T8LACD4F12/850B25C	48"				5000			Y	768386645078
T8LACD4F15/835B	T8LACD4F15/835B25C	48"				3500			Y	768386645085
T8LACD4F15/840B	T8LACD4F15/840B25C	48"	2200	15	147	4000	240°	25	Y	768386645092
T8LACD4F15/850B	T8LACD4F15/850B25C	48"				5000			Y	768386645108

ADDITIONAL SPECIFICATIONS

Lamp Type:	Linear T8
Base:	Medium Bi-Pin (G13)
Color Rendering Index (CRI)	82
Rated Life:	L70 @ 50000 hours

Ambient Temperature	-4°F to 113°F
Beam Angle	240°
EMI/RFI	FCC Part 18 - Non-Consumer
Warranty	5 years

WIRING DIAGRAM

AC INPUT

L   N
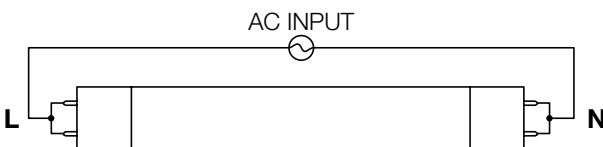
OPERATING NOTES:

* Input voltage is wired so that one lamp holder is connected to Neutral and the other to Line.

* Shunted or Non-Shunted lamp holders may be used.

Universal Lighting Technologies

STxx-865-yS

Description: LED Sign Module

➢ Simple and easy installation
➢ Long life with high efficacy
➢ Integrated heat sink for cool operation
➢ Class 2 rating simplifies wiring

Ordering Code	Nominal Measurements					
	Length	Configuration	Voltage (V)	Initial Lumens [1]	Power (W)	Lm/W
ST24-865-SS004C	24"	Single Sided	24	680	6	113
ST24-865-DS004C	24"	Double Sided	24	1,360	12	113
ST36-865-SS004C	36"	Single Sided	24	1,020	9	113
ST36-865-DS004C	36"	Double Sided	24	2,040	18	113
ST48-865-SS004C	48"	Single Sided	24	1,360	12	113
ST48-865-DS004C	48"	Double Sided	24	2,720	24	113
ST60-865-SS004C	60"	Single Sided	24	1700	15	113
ST60-865-DS004C	60"	Double Sided	24	3400	30	113
ST72-865-SS004C	72"	Single Sided	24	2,040	18	113
ST72-865-DS004C	72"	Double Sided	24	4,080	36	113
ST84-865-SS004C	84"	Single Sided	24	2,380	21	113
ST84-865-DS004C	84"	Double Sided	24	4,760	42	113
ST96-865-SS004C	96"	Single Sided	24	2,720	24	113
ST96-865-DS004C	96"	Double Sided	24	5,440	48	113
ST108-865-SS004C	108"	Single Sided	24	3,060	27	113
ST108-865-DS004C	108"	Double Sided	24	6,120	54	113
ST120-865-SS004C	120"	Single Sided	24	3,400	30	113
ST120-865-DS004C	120"	Double Sided	24	6,800	60	113

(1) MID Flux Bin Values are shown for CCT of 6500K. Tolerance of ±6.5% at 25°C

General Performance Specifications:

- Lumen Maintenance : L70 > 140K Hrs @ 25°C
- Lumen Maintenance : L85 > 60K Hrs @ 25°C
- Color Consistency: < 4 SDCM (6500K)

Application:

- Min. Ambient Operating Temp.:   -22°F, -30°C
- Max. Ambient Operating Temp.:   140°F, 60°C

Warranty:

- 5 Year Limited Warranty

Note:

Lumen maintenance based on LM80
testing and TM-21 calculation projections

Recommended Drivers:

Driver Part Number	Description
L24V100UNV-A	White Can
D24V100UNV-A	Black Can
L24V100UNV-Q	IP67 Sealed Can

Regulatory:

- UL 8750
- UL 879
- UL 879A
- CSA 250.13
- CSA 207

EVERLINE

Universal Lighting Technologies

LED TRADITIONAL RETROFIT SOLUTIONS

LRx4T8 - Low Power
4' Tube & Driver Kit

LT+D
TUBE+DRIVER

MECHANICAL
• Retrofits 4ft fluorescent luminaires to LED
• Replaces existing fluorescent lamps and ballasts
• Uses existing lamp holders
• No redesign or revised layout needed

OPTICAL
• 240° Beam distribution for even illumination
• Three CCT options with CRI of 82

KIT INCLUDES
• LED T8 Modules
• LED EVERLINE Driver – Pre-Tuned if applicable
• Wiring, connectors, installation instructions

ELECTRICAL
• Universal Input Voltage: 120-277V
• Equipped with 0-10V dimmable LED driver to 1%
• LED System efficacies exceed 120 LPW

CERTIFICATIONS
• UL Classified UL 1598C (US & Canada)
• FCC Title 47 CFR, Part 15, Class A
• RoHS Compliant, contains no lead or mercury

WARRANTY
• Six (6) year limited warranty

ORDERING GUIDE

EXAMPLE: LR34T8-66L840-10DU

Series	Lamp & Length	–	Nominal Lumens	CRI (nom.)	Color Temp.	–	Dimming	Voltage
LR = LED Retrofit	**14T8** = 1L 4ft T8	–	**18L** = 1,800	**8** = 82 (nom.)	**35** = 3500K	–	**10D** = 0-10V Dimming	**U** = 120-277VAC
	24T8 = 2L 4ft T8		**36L** = 3,600		**40** = 4000K			
	34T8 = 3L 4ft T8		**54L** = 5,400		**50** = 5000K			
	44T8 = 4L 4ft T8		**72L** = 7,200					

ORDERING NOTES
1. Orders are shipped in bundled quantities of 10 drivers and the corresponding number of tubes

Listed Products

	Model Number (2-Tube)	Model Number (3-Tube)	Model Number (4-Tube)
120-277V	LR24T8-36L835-10DU	LR34T8-54L835-10DU	LR44T8-72L835-10DU
	LR24T8-36L840-10DU	LR34T8-54L840-10DU	LR44T8-72L840-10DU
	LR24T8-36L850-10DU	LR34T8-54L850-10DU	LR44T8-72L850-10DU

PERFORMANCE DATA

	Lumen Package	Input Power (watts)	Input Current			System Output		Reference Luminaire	
			@ 120V	@ 277V	@ 347V	Delivered Lm (nom.)	LPW	Delivered Lm (nom.)	LPW
LR14T8	18L	15	0.13	0.05	0.05	1800	120	N/A	-
LR24T8	36L	28	0.24	0.10	0.10	3600	129	3222	114
LR34T8	54L	43	0.36	0.16	0.16	5400	126	4952	115
LR44T8	72L	58	0.49	0.21	0.21	7200	124	6743	116

• Performance data provided at 3500K.
• Reference Luminaire testing conducted by NVLAP accredited lab in accordance with IESNA LM-79.
• Consult factory for photometry.
• Application and performance information is subject to change without notification.

OPERATING DATA

L70 Lumen Maintenance	>60,000 hrs at 40°C
Min. Starting Temp:	0°F
Sound Rating:	Class A
Power Factor:	>.98
THD:	<20%

LED Driver

Lm Package	LED Driver -UNV
LR14T8-18L	D700C30UNVTWCP42C
LR24T8-36L	D700C30UNVTWCP83C
LR34T8-54L	D10CC55UNVTZCP85C
LR44T8-72L	D15CC55UNVTWCP80C

*Projected per IESNA TM-21. Data extrapolated based on 10,000 hours of LED testing per IESNA LM-80.

• Where "xx" = 35 (3500K), 40 (4000K), or 50 (5000K)   • Where "yyy" = UNV (120-277VAC) or 347 (347VAC)

Applications
• All LED Tubes must be connected for proper operation.
• Not for use with phase cut dimmers.
• Suitable for 2'x4' with minimum 3" depth, may include a lens, and may be listed for elevated ambients of up to 40ºC max in Type Non-IC or up to 25ºC max in Type IC.
• Suitable for 4' or 8' strip light, wraparound, and vapor tight (see installation instructions for dimensions and max ambient).

LED Tube

CCT	LED T8 Tube
3500K	LRT8M22L/835A
4000K	LRT8M22L/840A
5000K	LRT8M22L/850A

Universal
Lighting Technologies

LED TRADITIONAL RETROFIT SOLUTIONS

LRK
2' LED Retrofit Kit

RK
RETROFIT KIT

MECHANICAL
• Retrofits 2ft fluorescent luminaires to LED
• Fast and easy to install
• No redesign or revised layout needed

OPTICAL
• Diffuser provides broad, even light distribution
• Three CCT options with CRI of 82
• Binning maintains color accuracy and consistency

KIT INCLUDES
• LRK22 includes (2) and LRK32 includes (3) EVERLINE®
  LED lensed modules/light bars
• LED EVERLINE driver (0-10V dimming)
• Wiring, mounting hardware, installation instructions

ELECTRICAL
• Available as 120-277VAC or 347VAC
• Equipped with 0-10V dimmable LED driver to 1%
• LED system efficacies exceeding 100 LPW

CERTIFICATIONS
• UL Classified UL1598C (US & Canada)
• FCC Title 47 CFR, Part 15, Class A
• RoHS Compliant, contains no lead or mercury
• Select models (identified below) are DesignLights Consortium™
  qualified. Consult www.designlights.org/QPL for details.

WARRANTY
• Seven (7) year limited warranty

ORDERING GUIDE

EXAMPLE: LRK32-30L840-U[3]

Series	Lamp & Length	–	Nominal Lumens[1]	CRI (nom.)	Color Temp.	–	Voltage[2]
LRK = LED Linear Retrofit Kit	**22** = 2L / 2ft **32** = 3L / 2ft	–	**23L** = 2,300 **30L** = 3,000 **45L[4]** = 4,500	**8** = 82 (nom.)	**35** = 3500K **40** = 4000K **50** = 5000K	–	**U** = 120-277VAC **347** = 347VAC

ORDERING NOTES
1. 23L & 30L lumen packages available for 2-lamp kits. 30L & 45L lumen packages available for 3-lamp kits.
2. 23L is not available in 347V.
3. Append catalog number with 00I for single kit package (2 or 3 LED Lensed Modules & 1 LED Driver) or 10C for 10 kit package (LRK22 only) or 06C for 6 kit package (LRK32 only).
4. LRK-32-45L8xx-U rated at max 35°C.

DesignLights Consortium™ QPL Listed Products

Model Number
LRK22-23L835-U
LRK22-23L840-U
LRK22-23L850-U
LRK32-30L835-U
LRK32-30L840-U

Model Number
LRK32-30L850-U
LRK32-30L835-347
LRK32-30L840-347
LRK32-30L850-347

DLC QPL LISTED®

PERFORMANCE DATA

	Lumen Package	Input Power (watts)	Input Current			LRK System	
			@ 120V	@ 277V	@ 347V	Delivered Lm (nom.)	LPW
LRK22	23L	21.8	0.18 A	0.09 A	N/A	2674	123
LRK22	30L	31.6	0.26 A	0.12 A	0.09 A	3459	109
LRK32	30L	30.3	0.25 A	0.11 A	0.09 A	3754	124
LRK32	45L	52.9	0.44 A	0.20 A	0.15 A	5568	105

• Performance data provided at 4000K, multiply lumens and LPW by 1.04 for 5000K or 0.97 for 3500K.

• Reference Luminaire testing conducted by NVLAP accredited lab in accordance with IESNA LM-79.

• Consult factory for photometry.

• Application and performance information is subject to change without notification.

OPERATING DATA

L85 Lumen Maintenance:	>60,000 hrs. at 40°C
L70 Lumen Maintenance:*	>140,000 hrs. at 40°C
Min. Starting Temp.:	-30°C (-22°F)
Sound Rating:	Class A
EMI/RFI:	FCC Title 47 CFR, Part 15, Class A
Power Factor:	>0.98
THD:	<20%
Input Power Frequency	50/60 Hz

*Projected per IESNA TM-21. Data extrapolated based on 10,000 hours of LED testing per IESNA LM-80.

COMPONENTS

Lm Package	LED Driver	LED Replacement Lamp
23L	D700C30UNVTZCP75C	LRL12-15L8xx-525C
30L	D10CC55yyyTZCP72C	LRL12-15L8xx-525C
45L	D15CC55yyyTZCP86C	LRL12-15L8xx-525PRM

• Where "xx" = 35 (3500K), 40 (4000K), or 50 (5000K)   • Where "yyy" = UNV (120-277VAC) or 347 (347VAC)

Applications
• All LED Lensed Modules must be connected for proper operation.
• The standard base model version of this module without Conformal Coating is designed for indoor fixtures in dry applications. Damage caused by corrosion due to moisture, condensation and other harmful elements, is not covered by the warranty.
• Not for use with phase cut dimmers.
• Suitable for 2'x2' with minimum 3" height, may be type IC, may include a lens, and may be listed for elevated ambients of up to 40°C max.
• Suitable for 2' or 4' strip light. wraparound, and vapor tight (see installation instructions for dimensions and max ambient).

Universal™ Lighting Technologies

LED TRADITIONAL RETROFIT SOLUTIONS

LRK
4' LED Retrofit Kit

RK
RETROFIT KIT

MECHANICAL
- Retrofits 4ft fluorescent luminaires to LED
- Fast and easy to install
- No redesign or revised layout needed

OPTICAL
- Diffuser provides broad, even light distribution
- Multiple CCT options with CRI of 82
- Binning maintains color accuracy and consistency

KIT INCLUDES
- LRK24 includes (2) and LRK34 includes (3) EVERLINE® LED lensed modules/light bars
- LED EVERLINE driver (0-10V dimming)
- Wiring, mounting hardware, installation instructions

ELECTRICAL
- Available as 120-277VAC or 347VAC
- Equipped with 0-10V dimmable LED driver to 1%
- LED system efficacies exceeding 120 LPW

CERTIFICATIONS
- UL Classified UL1598C (US & Canada)
- FCC Title 47 CFR, Part 15, Class A
- RoHS Compliant, contains no lead or mercury
- Select models (identified below) are DesignLights Consortium® qualified. Consult www.designlights.org/QPL for details.

WARRANTY
- Seven (7) year limited warranty

ORDERING GUIDE

EXAMPLE: LRK34-30L840-U[1]

Series	Lamp & Length		Nominal Lumens[2]	CRI (nom.)	Color Temp.[3]		Voltage[2]
LRK = LED Linear Retrofit Kit	**24** = 2L / 4ft **34** = 3L / 4ft	–	**40L** = 4,000 **43L** = 4,300 **46L** = 4,600 **60L** = 6,000	**8** = 82 (nom.)	**30** = 3000K **35** = 3500K **40** = 4000K **50** = 5000K	–	**U** = 120-277VAC **347** = 347VAC

ORDERING NOTES
1. Append catalog number with 00I for single kit package (2 or 3 LED Lensed Modules & 1 LED Driver) or 10C for 10 kit package (LRK24 only) or 06C for 6 kit package (LRK34 only).
2. 40L and 43L lumen packages available for 2-lamp kits only. 40L and 43L are not available in 347V.
3. Only LRK24 in 46L and 60L available in 3000K.

DesignLights Consortium™ QPL Listed Products

Model Number	Model Number	Model Number	Model Number	Model Number	Model Number
LRK24-40L835-U	LRK24-43L850-U	LRK24-60L840-U	LRK34-60L835-U	LRK24-46L850-347	LRK34-46L840-347
LRK24-40L840-U	LRK24-46L835-U	LRK24-60L850-U	LRK34-60L840-U	LRK24-60L835-347	LRK34-46L850-347
LRK24-40L850-U	LRK24-46L840-U	LRK34-46L835-U	LRK34-60L850-U	LRK24-60L840-347	LRK34-60L835-347
LRK24-43L835-U	LRK24-46L850-U	LRK34-46L840-U	LRK24-46L835-347	LRK24-60L850-347	LRK34-60L840-347
LRK24-43L840-U	LRK24-60L835-U	LRK34-46L850-U	LRK24-46L840-347	LRK34-46L835-347	LRK34-60L850-347

DLC QPL LISTED

PERFORMANCE DATA

	Lumen Package	Input Power (watts)	Input Current			LRK System	
			@ 120V	@ 277V	@ 347V	Delivered Lm (nom.)	LPW
LRK24	40L	29.7	0.25A	0.11A	N/A	3992	134
LRK24	43L	36.4	0.31A	0.13A	N/A	4435	122
LRK24	46L	41.6	0.35 A	0.16 A	0.12 A	5996	144
LRK24	60L	61.6	0.51 A	0.22 A	0.18 A	7960	129
LRK34	46L	40.7	0.34 A	0.15 A	0.12 A	6027	148
LRK34	60L	59.8	0.50 A	0.22 A	0.17 A	8060	135

- Performance data provided at 4000K, multiply lumens and LPW by 1.04 for 5000K or 0.97 for 3500K or 0.95 for 3000K.
- Reference Luminaire testing conducted by NVLAP accredited lab in accordance with IESNA LM-79.
- Consult factory for photometry.
- Application and performance information is subject to change without notification.

OPERATING DATA

L85 Lumen Maintenance:	>60,000 hrs. at 40°C
L70 Lumen Maintenance:*	>140,000 hrs. at 40°C
Min. Starting Temp.:	-30°C (-22°F)
Sound Rating:	Class A
EMI/RFI:	FCC Title 47 CFR, Part 15, Class A
Power Factor:	>0.98
THD:	<20%
Input Power Frequency	50/60 Hz

*Projected per IESNA TM-21. Data extrapolated based on 10,000 hours of LED testing per IESNA LM-80.

COMPONENTS

Lm Package	LED Driver	LED Replacement Lamp
40L	D10CC55UNVTZCP71C	LRL14-30L8xx-750C
43L	D10CC55UNVTZCP87C	LRL14-30L8xx-750C
46L	D10CC55yyyTZ-C10C	LRL14-30L8xx-750C
60L	D15CC55yyyTZ-C10C	LRL14-30L8xx-750C

- Where "xx" = 35 (3500K), 40 (4000K), or 50 (5000K) • Where "yyy" = UNV (120-277VAC) or 347 (347VAC)

Applications
- All LED Lensed Modules must be connected for proper operation.
- The standard base model version of this module without Conformal Coating is designed for indoor fixtures in dry applications. Damage caused by corrosion due to moisture, condensation and other harmful elements, is not covered by the warranty.
- Not for use with phase cut dimmers.
- Suitable for 2'x4' with minimum 3" depth, may include a lens, and may be listed for elevated ambients of up to 40°C max in Type Non-IC or up to 25°C max in Type IC.
- Suitable for 4' or 8' strip light, wraparound, and vapor tight (see installation instructions for dimensions and max ambient).

Universal™
Lighting Technologies

LED TRADITIONAL RETROFIT SOLUTIONS

High Bay LRK
4' LED Retrofit Kit

RK RETROFIT KIT

MECHANICAL
- Retrofits 4ft high bay fluorescent luminaires to LED
- Fast and easy to install
- No redesign or revised layout needed

OPTICAL
- Three CCT options with CRI of 82
- Binning maintains color accuracy and consistency

KIT INCLUDES
- (4) EVERLINE® LED modules/light bars
- LED EVERLINE driver (0-10V dimming)
- Wiring, mounting hardware, installation instructions

ELECTRICAL
- Available as 120-277VAC
- Equipped with 0-10V dimmable LED driver to 1%
- LED system efficacies exceeding 140 LPW

CERTIFICATIONS
- UL Classified UL1598C (US & Canada)
- FCC Title 47 CFR, Part 15, Class A
- RoHS Compliant, contains no lead or mercury
- DesignLights Consortium® Premium qualified. Consult www.designlights.org/QPL for details.

WARRANTY
- Seven (7) year limited warranty

ORDERING GUIDE

EXAMPLE: LRK44-14K840-U[1]

Series	Lamp & Length	–	Nominal Lumens	CRI (nom.)	Color Temp.	–	Voltage
LRK = LED Linear Retrofit Kit	**44** = 4L / 4ft	–	**14K** = 14,000	**8** = 82 (nom.)	**35** = 3500K **40** = 4000K **50** = 5000K	–	**U** = 120-277VAC

ORDERING NOTES
1. Append catalog number with 10C for 10 kit package. Must order in multiples of 10.

DesignLights Consortium® QPL Listed Products

Model Number
LRK44-14K835-U
LRK44-14K840-U
LRK44-14K850-U

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PERFORMANCE DATA

Lumen Package		Input Power (watts)	Input Current			LRK System	
			@ 120V	@ 277V	@ 347V	Delivered Lm (nom.)	LPW
LRK44	14K	89.7	0.75.A	0.32	N/A	12875	144

- Performance data provided at 4000K, multiply lumens and LPW by 1.04 for 5000K or 0.97 for 3500K.
- Reference Luminaire testing conducted by NVLAP accredited lab in accordance with IESNA LM-79.
- Consult factory for photometry.
- Application and performance information is subject to change without notification.

OPERATING DATA

L85 Lumen Maintenance:	>60,000 hrs. at 40°C
L70 Lumen Maintenance:*	>140,000 hrs. at 40°C
Min. Starting Temp.:	-30°C (-22°F)
Sound Rating:	Class A
EMI/RFI:	FCC Title 47 CFR, Part 15, Class A
Power Factor:	>0.98
THD:	<20%
Input Power Frequency	50/60 Hz

*Projected per IESNA TM-21. Data extrapolated based on 10,000 hours of LED testing per IESNA LM-80.

COMPONENTS

Lm Package	LED Driver	LED Replacement Lamp
14K	D23CC90UNVT-F20KC	LRL14-30L8xx-750LL010C

- Where "xx" = 35 (3500K), 40 (4000K), or 50 (5000K)

Applications
- All LED Modules must be connected for proper operation.
- The standard base model version of this module without Conformal Coating is designed for indoor fixtures in dry applications. Damage caused by corrosion due to moisture, condensation and other harmful elements, is not covered by the warranty.
- Not for use with phase cut dimmers.
- Suitable for non-lensed 2'x4', suspended by 12" or more, 40°C max ambient, damp location.

Universal™ Lighting Technologies

LED TRADITIONAL RETROFIT SOLUTIONS

LRA
LED Retrofit Kit Assembly

MECHANICAL
- Retrofits 4ft or 8ft fluorescent strip fixtures to LED
- Fast and easy to install
- No redesign or revised layout needed
- Universal mounting compatible with most strip manufacturers
- Panel is 23 gauge painted steel

OPTICAL
- Diffuser provides broad, even light distribution
- Three CCT options with CRI of 82
- Binning maintains color accuracy and consistency

ELECTRICAL
- Available as 120-277VAC
- Equipped with 0-10V dimmable LED driver to 1%
- LED system efficacies exceeding 115 LPW

ASSEMBLY INCLUDES
- (1) or (2) EVERLINE® LED lensed modules pre-mounted
- (1) LED EVERLINE driver (0-10V dimming) pre-mounted
- (1) or (2) 4' strip fixture panels
- Wiring, mounting hardware, installation instructions

CERTIFICATIONS
- UL Classified UL1598C (US & Canada)
- Suitable for Dry or Damp locations
- FCC Title 47 CFR, Part 15, Class A
- RoHS Compliant, contains no lead or mercury
- Select models are DesignLights Consortium® qualified. Consult http://www.designlights.org/QPL for details.

WARRANTY
- Seven (7) year limited warranty

ORDERING GUIDE

EXAMPLE: LRA28-60L835-U

Series	Lamp & Length		Nominal Lumens	CRI (nom.)	Color Temp.		Voltage
LRA = LED Linear Retrofit Assembly	**14** = 1L / 4ft **28** = 2L / 8ft	–	**23L** = 2,300 **30L** = 3,000 **40L** = 4,000 **42L** = 4,200 **46L** = 4,600 **60L** = 6,000 **84L** = 8,400	**8** = 82 (nom.)	**35** = 3500K **40** = 4000K **50** = 5000K	–	**U** = 120-277VAC

ORDERING NOTES
1. 23L, 30L & 42L lumen packages are only available in 4' assemblies. 40L, 46L & 84L lumen packages are only available in 8' assemblies.
2. Append catalog number with 00C for carton kit package (1 or 2 LED Lensed Modules & 1 LED Driver) mounted on one or two 4' panels.

DesignLights Consortium™ QPL Listed Products

Model Number	Model Number	Model Number	Model Number	Model Number	Model Number
LRA14-23L835-U	LRA14-30L840-U	LRA14-42L850-U	LRA28-46L835-U	LRA28-60L850-U	LRA28-40L835-U
LRA14-23L840-U	LRA14-30L850-U	LRA14-60L835-U	LRA28-46L840-U	LRA28-84L835-U	LRA28-40L840-U
LRA14-23L850-U	LRA14-42L835-U	LRA14-60L840-U	LRA28-60L835-U	LRA28-84L840-U	LRA28-40L850-U
LRA14-30L835-U	LRA14-42L840-U	LRA14-60L850-U	LRA28-60L840-U	LRA28-84L850-U	LRA28-46L850-U

PERFORMANCE DATA

	Lumen Package	Input Power (watts)	Input Current @ 120V	Input Current @ 277V	LRA System Delivered Lm (nom.)	LPW
LRA14	23L	20.7	0.17A	0.08A	2388	115
LRA14	30L	26.7	0.23A	0.10A	2979	112
LRA14	42L	37.3	0.31A	0.14A	4671	125
LRA14	60L	58.3	0.49A	0.21A	6702	115
LRA28	40L	29.7	0.25A	0.11A	3992	134
LRA28	46L	42.8	0.36A	0.16A	5128	120
LRA28	60L	61.7	0.51 A	0.22 A	7096	115
LRA28	84L	67.8	0.57A	0.25A	8331	123

- Performance data provided at 4000K, multiply lumens and LPW by 1.02 for 5000K, or 0.97 for 3500K.
- Reference Luminaire testing conducted by NVLAP accredited lab in accordance with IESNA LM-79.
- Consult factory for photometry.
- Application and performance information is subject to change without notification.

OPERATING DATA

L85 Lumen Maintenance:	>60,000 hrs. at 40°C
L70 Lumen Maintenance:*	>140,000 hrs. at 40°C
Min. Starting Temp.:	-30°C (-22°F)
Sound Rating:	Class A
EMI/RFI:	FCC Title 47 CFR, Part 15, Class A
Power Factor:	>0.98
THD:	<20%
Input Power Frequency	50/60 Hz

*Projected per IESNA TM-21. Data extrapolated based on 10,000 hours of LED testing per IESNA LM-80.

COMPONENTS

LRA	LED Driver	LED Replacement Lamp
LRA14-23L8xx-U	D700C30UNVTZCP72C	LRL14-30L8xx-750CC00I
LRA14-30L8xx-U	D700C30UNVTZCP93C	LRL14-30L8xx-750CC00I
LRA14-42L8xx-U	D10CC55UNVTZCP86C	LRL14-30L8xx-1050PRMCC00I
LRA14-60L8xx-U	D15CC55UNVTWCP90C	LRL14-30L8xx-1050PRMCC00I
LRA28-40L8xx-U	D10CC55UNVTZCP71C	LRL14-30L8xx-750CC00I
LRA28-46L8xx-U	D10CC55UNVTZ-C10C	LRL14-30L8xx-750CC00I
LRA28-60L8xx-U	D15CC55UNVTZ-C10C	LRL14-30L8xx-750CC00I
LRA28-84L8xx-U	D21CC80UNVTZDP79C	LRL14-30L8xx-1050PRMCC00I

* Where "xx" = 35 (3500K), 40 (4000K), or 50 (5000K)

Applications
- All LED Lensed Modules must be connected for proper operation.
- Not for use with phase cut dimmers.
- Suitable for 4' or 8' strip light: non-lensed, minimum wiring compartment dimensions 2.5" depth and 2" width.

Universal™ Lighting Technologies

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51 Century Blvd., Suite 230
Nashville, TN 37214-3683

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