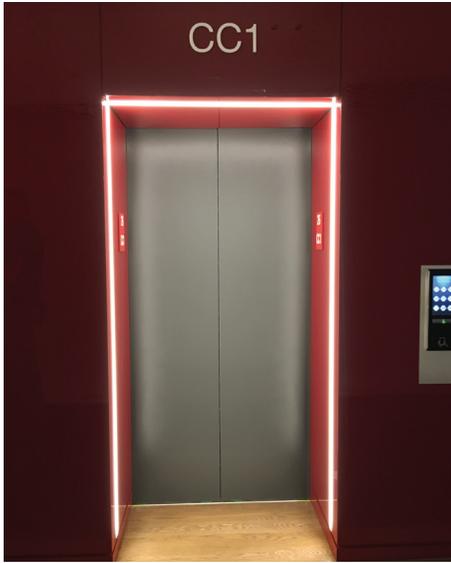
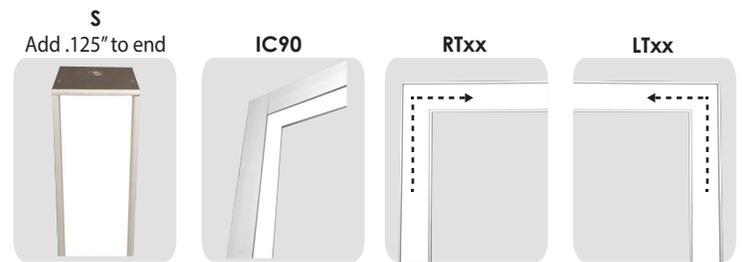
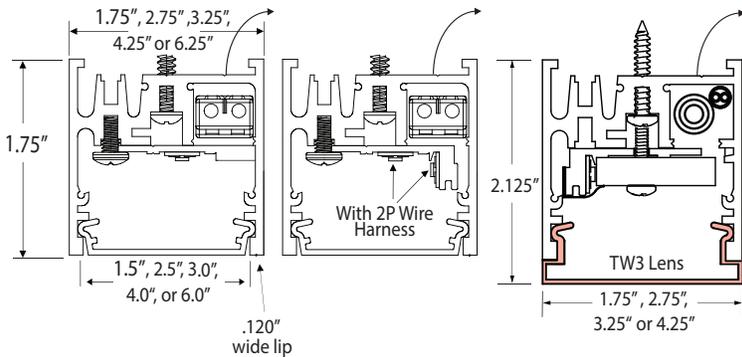
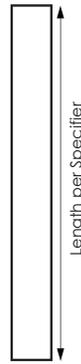


# LiftLine LED<sub>x</sub> 1.5, 2.5, 3.0, 4.0 or 6.0

Type:



Shallow lines of light for elevators & thresholds  
 Use for general, emergency & indicator lighting  
 Order in any length for precise fit  
 Mounts within metal, stone or wood surfaces  
 in head trimmer, door frame or elevator interior  
 Optional tall lens extends over lips  
 Provides minimum 5fc (50Lx) or 10fc (100lx) on  
 threshold per ASME A17.1 2.11.10.2  
 Can be connected to emergency lighting circuit  
 Red, Green, Blue colors available for indicator lights



### Environmental Data

For 3KL & 3AKL lamping at 3000k: W: 2.5W/ft (8W/m) LLD: 50,000hrs @ 70%lm 40ft (12M) on one 100w driver	For Standard Output lamping at 3000k: W: 4.9W/ft (16W/m) LLD: 50,000hrs @ 70%lm 20ft (6M) on one 100w driver 12ft (3.7m) on one 60w driver	For High Output lamping at 3000k: W: 9.8W/ft (32W/m) LLD: 50,000hrs @ 70%lm 10ft (3M) on one 100w driver	Temp range: 0° ~ 90°F (-20 ~ 30°C) No Mercury, No UV, No Flicker Warranty: 5 years cETLus Damp Listed IC Rated
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### Ordering

<b>Series</b>	LL15 LL25 LL30 LL40 LL60	LiftLine LED 1.5 in width LiftLine LED 2.5 in width LiftLine LED 3.0 in width LiftLine LED 4.0 in width LiftLine LED 6.0 in width
<b>Lamping</b>	3KL 3AKL** 1ML 1AML** 2ML 2AML** __CC __ACC	88lu/ft LED 2.5w/ft (8w/m) (30 & 35K) 143lu/ft LED 2.5w/ft (8w/m) (30 & 35K) 175lu/ft LED 4.9w/ft (16w/m) 285lu/ft LED 4.9w/ft (16w/m) 350lu/ft LED 9.8w/ft (32w/m) 570lu/ft LED 9.8w/ft (32w/m) Constant Current LED Up to 8.0w/ft Up to 8.0w/ft (485lu/ft) Constant Current LED Up to 8.0w/ft Up to 8.0w/ft (791lu/ft) **Available in LL15 series only
<b>Color</b>	27 30 35 40	2700K, 85+ CRI    R    Red 3000K, 85+ CRI    G    Green 3500K, 85+ CRI    B    Blue 4000K, 85+ CRI
<b>Wire Harness</b>	1 2* or 3*  2P*	Single Separate harnesses for multiple color sections in same housing Two colors parallel entire length * Requires additional drivers
<b>Lens</b>	W TW3 G  P__	White flush 3/8" Tall White (Not available with LL60) Custom graphics, braille to be added to W or TW3 lens 2.5" Puck lantern +color (list twice for Up/Down) Add to W lens (Not for use with LL15 or LL25)
<b>Driver</b>	R	Remote
<b>Start End</b>	S RECF PAT	Straight End __x__ Rectangle Flat XX" by XX" Use to denote patterns as drawn
<b>Length</b>	xx xxFC	xx is distance in inch or mm *OAL* to include 1/8" thick end caps in length Allows for housing to be field cut for exact fit
<b>Transition</b> <small>(Only if lens changes direction. Consult factory for angles beyond range shown)</small>	LTxx ICxx	Left Turn same plane (degrees 66° to 179°) Inside Corner (degrees 75° to 179°)
<b>Finish End</b>	__	Choose from Start End choices listed above
<b>Lip Color</b>	NA BZ WH	Natural anodized    BK    Black Bronze    __    Other White (Add E if entire fixture needs color)
<b>Units</b>	in	inches    mm    mm
<b>Options</b>	CL2Pxx  CP EF EME EM5	Longer length CL2P feed cable (std is 15ft) to reach remote power supply Chicago Plenum Feed cable exits end (10' or shorter housings) All feed cables labeled for connection to EM circuit 5' section(s) in run labeled for connection to EM circuit



# LiftLineLED 1.5, 2.5, 3.0, 4.0 or 6.0 x 1-3/4"

## R-FLV Driver

Forward phase low voltage remote mounted power supply with 24Vdc Constant Voltage output for simple class 2 installation. 20W, 40W, 60W or 96W; 120V 60Hz input. Minimum 50% watt load required; e.g. 10W on ELV20  
Dims to 20% with forward phase 2-wire magnetic low voltage dimmer. Short circuit and overload protected.  
Non-IC installations.  
Listed for 90 C conductors with 1/2" trade size knock outs. NEMA 3R enclosure.

## R-xxx-UNV Drivers

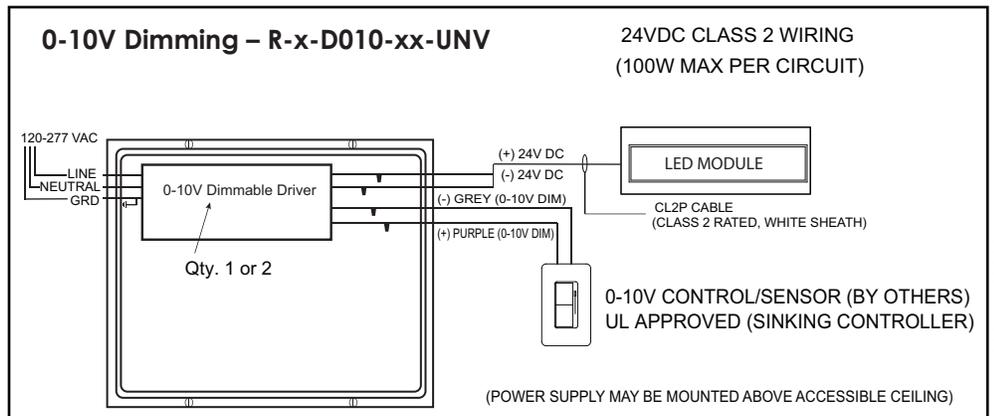
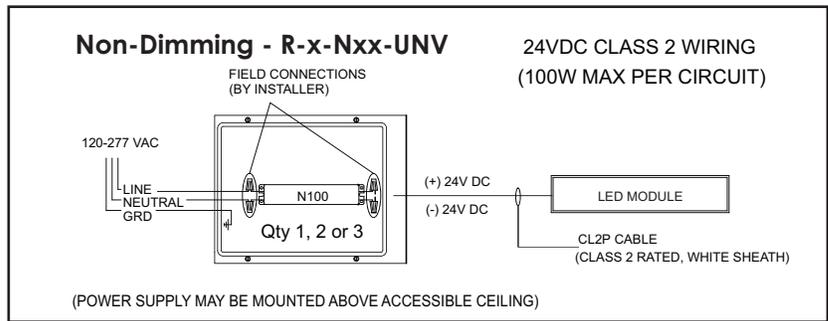
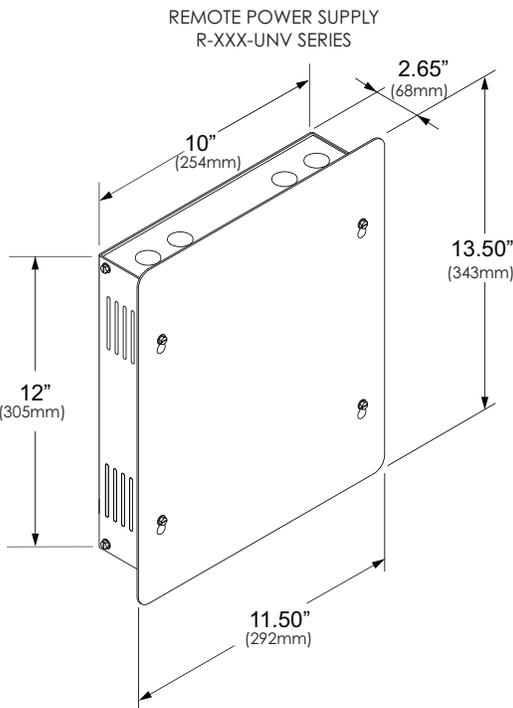
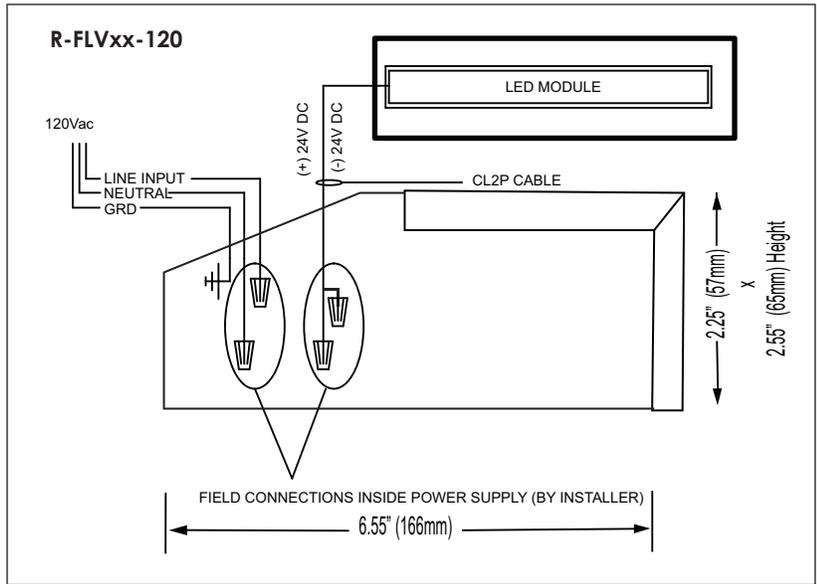
Remotely located power supply with 24Vdc Constant Voltage, or Constant Current, output for simple class 2 installation. Electronic Drivers 50/60 Hz, 120 thru 277 input. Choice of 0-10V dimming or switched on/off. Dimmable drivers with 3KL, 1ML, or 2ML may flicker below 10%. Use Constant Current version to dim to 1%.  
Nxx requires 8W and D010 requires 20W minimum load  
Type A Sound Rating,  
Non IC installations standard; consult factory for IC installation. May be surface mounted or recessed in 2x4 walls or above accessible ceilings.  
Housing is die formed 16ga CRS with White painted after fabrication finish.  
Listed for 90°C conductors with 1/2" trade size Knock Outs.

## R-DLUT96-UNV Driver

\* For use with 6P lamping only.  
Dims to 1%  
Remote power supply 24Vdc Constant Voltage Output. 50/60Hz, 120 thru 277V input.  
Class A sound rated.  
Rated for Damp location use. Non-IC installations.  
Dims with 3-Wire dimmer or EcoSystem™ Requires 2w minimum load. For more info visit:  
<http://www.lutron.com/TechnicalDocumentLibrary/369883.pdf>

Driver*	R	Remote
Drive Qty Per Power Supply	- X	Blank for FLV & DLUTP type Factory determined with Nxx or D010 type
Type	FLVxx Nxx D010 D010-CC_ DLUTP96	Forward phase low voltage, 20, 40, 60 or 96W Non-dim 100W max. Dimming via 0-10Vdc **Constant Current (up to 8.0w/ft) Lutron Hi-Lume Premier 96W (6P lamping only)
Voltage	UNV 120 CP	Universal 120-277V for Nxx or D010 type 120 only for FLV type Chicago Plenum rated enclosure

\*Consult factory for DALi, DMX & Lutron driver options.  
\*\*Constant Current requires a factory programmed driver for each LED panel.



## Housing

Extruded aluminum housing mounts via screws to framing. Surface material\* (metal, tile, stone, etc.) can abut housing sides.  
 \* If wood on 3 sides, drill 3/4" holes behind fixture every 6" to ensure adequate venting. Anodized for superior thermal performance.  
 Housing ships with 15ft CL2P cable attached to back to reach remote power supply. Longer lengths optional, or 12AWG wire can be added on site; up to 20' with D010 or 50' with Nxx & FLV.  
 One-piece extrusions up to 123". Multiple housings couple together with crossbolt and pins for secure fit & straight alignment  
 Inside corner sections overlap for even illumination without direct view of LEDs.  
 ETL listed, IC rated, damp location.

## Option

"CP" Chicago Plenum rated housing with j-box for attachment of 1/2" EMT.  
 "EME" (entire fixture) or EM5 (5' section of a run) with EM labeled feed cable(s). Requires relay by others to switch from normal to EM input at driver. Dado does not provide battery packs.  
 "EF" Feed cable exits end, instead of back, on 10' or shorter housings.

## Transitions

When lens changes directions (Minimum length 3.875" or 98mm per side).  
 "LT" Left Turn same plane (degrees 90° to 179°)  
 "RT" Right Turn same plane (degrees 90° to 179°)  
 "IC" inside corner between two planes. Housings overlap without visible end cap for continuous line of light through corner.  
 "OC" outside corner around two planes; pre-assembled at factory. 90° standard, consult factory for other angles.

## LED

LED boards attached to aluminum heat sink at factory (no need to clean surface with alcohol on site to prevent air bubbles under neath).  
 Low wattage white light LED produces even distribution with no shadows. Binned within 2 MacAdam ellipses.

## Optics

Light guide panel diffuses multiple LED sources.  
 Panel plugs into housing via DC quick connects & is secured with screws for quick & easy replacement.  
 Snap-in high transmission acrylic lens with matte white finish, up to 26ft per section with flush W lens, or up to 10ft with TW3.  
 Custom graphics & raised braille for ADAAG signage can be added by factory. Ink is UV cured to resist flaking, scratches & fading.

## Modifications

Runs can be provided to the nearest 1/16" or 1mm.  
 "FC" Field cutting allows for a perfect architectural fit.  
 "FC" Housings may be field cut up to 6", then LED panels are ordered to fit. **DO NOT CUT non-FC HOUSINGS.**  
 For unique custom work, such as sharp corners, consult factory for shop drawings.

## Photometric Data

### BALLabs

Independent LM-79  
 Test No. 17943.0

This is an absolute test per LM-79-08  
 Luminous Length: 24"  
 Width: 1.5"

Cat No.: LL15-2AML-35-1-W-R-S-24-S-in \*  
 Meanwell Driver No.: LPV-20-24  
 operating at 120v  
 Total Lumens: 1142

\* Multiply all data by:  
 .50 for 1AML;  
 .25 for 3AKL;  
 1.39 for 8.0ACC  
 Multiply all data by .60 if 2P wire harness

This is an absolute test per LM-79-08  
 Luminous Length: 24"  
 Width: 1.5"

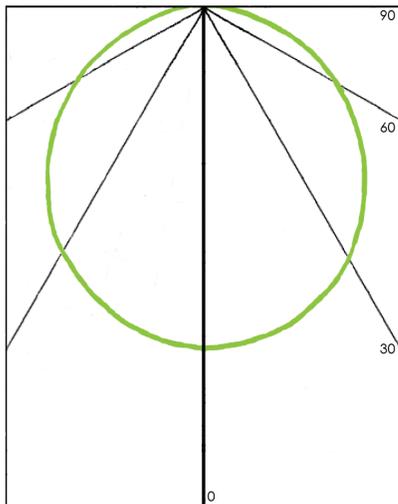
### Zonal Lumen Summary

Zone	Lumen	% Luminaire
0-30°	315	27.7%
0-40°	512	45.1%
0-60°	894	78.7%
60-90°	242	21.3%
90-180°	0	0%
0-180°	1,136.00	100%

### Luminance Data (cd/m2)

Angle	Along	45°	Across
45°	16411	16065	15660
55°	15530	14960	14604
65°	14986	14213	13826
75°	13262	12788	12630
85°	11252	10783	11721

Candlepower Distribution (cd)



Angle	Along	45°	Across
0°	410	410	410
5°	415	411	407
10°	407	400	399
15°	399	394	389
20°	385	378	372
25°	367	359	355
30°	348	338	334
35°	324	313	310
40°	300	291	287
45°	272	267	260
50°	243	234	229
55°	209	201	197
60°	178	172	165
65°	149	141	137
70°	111	106	105
75°	81	78	77
80°	48	48	45
85°	23	22	24
90°	0	0	0

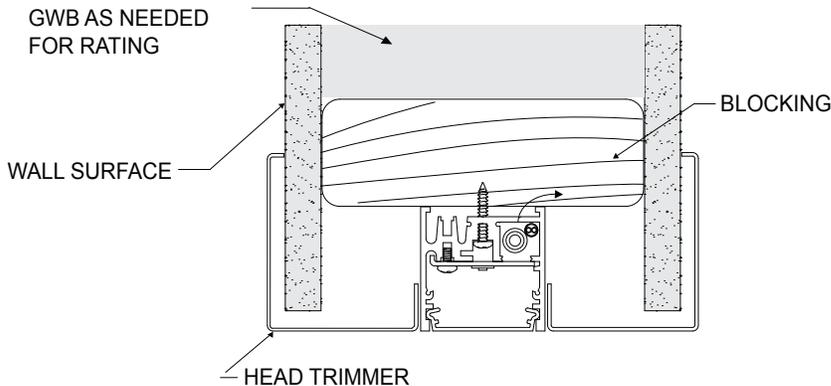


Ex. Cat #s

- (1) White light in head trimmer over door threshold: LL15-2AML-1-W-R-S-Length-S-Finish-in / R
- (2) Red & Green dedicated indicator sections, single lens with internal divider, each color connected to appropriate call signal: LL25-2ML/2ML-G/R-2-W-R-S-Length/Length-S-Finish-in/R
- (3) White light that switches to blue when cab arrives: LL25-1ML/2ML-30/B-2P-W-R-S-Length-S-Finish-in / R
- (4) Rectangular pattern in ceiling of cab: C-LL15-2AML-1-30-W-R-RECF Length x Width - Finish-in
- (5) Fixture to be on normally as White. Small section switches to Green when Up cab arrives, and lower section switches to Red when Down cab arrives: LL15-2AML-30/R/G-3-W-R-S-PAT-S-FINISH-in / R
- (6) 3" min. width with 2.5" D pucks that illuminate red or green when cab arrives: LL30-1ML-30-3-W-PR/PG-R-S-Length-S-Finish-in / R

Notes:

- \* For blinking lights or brightness level changes when cab arrives, detail sequence of operation in specification.
- \*\* Shop drawings will detail connection to call signal circuits.



Denotes exit location of factory attached feed cable. Typically 12" in from end, exits out back. See EF option for exit out end. Longer runs or multiple colors may require additional feed cables.