

NS LED

| | |
|---------------|--|
| Project Name: | |
| Type: | |



APPLICATION

The LED slim strip light series are more efficient and compact. The LED technology used illuminates a crisper brightness while saving more energy to that of the traditional lights. Its functionality makes it a standard fixture used in storage areas, displays, institutions, industrial and retail applications.

FEATURES:

- Die-formed steel channel with knock-outs for versatile configuration and simple mounting.
- Available for individual unit only.
- Finish is high-gloss baked white enamel over rust inhibiting phosphate coating for maximum corrosion resistance.
- Paint after fabrication.

MOUNTING:

- Ceiling/surface mount and pendant mount with chains, stems or cables.
- Compatible with most ceiling types.

LED:

- High quality array LEDs.
- Color Temperature: 2700/3000/3500/4000/5000 (K)
- Standard CRI: >82.8
- Calculated L70: 122,000 hours
- Reported L70: +60,000 hours

ELECTRICAL:

- High power factor electronic driver, operate from 120-277V standard input range, 50/60Hz.
- Over voltage protection, surge, short circuit protection and over load protection included.
- Power Factor: >0.95
- THD: <20
- Class 1 or Class 2
- 0-10V dimming standard.

<ELCU-200>

- Guarantees emergency lighting remains ON or is turned on when power to the control device is lost.
- Interfaces with fire alarm panel or security system.
- "Watchdog" feature allows emergency loads to be controlled in tandem with normal power loads.
- UL listed for use in emergency circuits.

LISTING:

- UL/cUL listed.
- Listed to UL 1598 and UL 8750.
- Suitable for damp locations.
- CEC Compliant EM (contact for more information).
- ARRA compliant (optional).
- BAA compliant (optional).
- 5 years warranty.
- 7 or 10 years limited warranty. (optional)⁵
- Bluetooth Mesh System available, please contact factory for more information.


CONFIGURATIONS

| Series | Size | Model # | AC Input | Lumen Output (3000K) | Lumen Efficiency (3000K) | lm Lumen Output (3500K) | Lumen Efficiency (3500K) | Lumen Output (4000K) | Lumen Efficiency (4000K) | Lumen Output (5000K) | Lumen Efficiency (5000K) |
|--------|------|---------|----------|----------------------|--------------------------|-------------------------|--------------------------|----------------------|--------------------------|----------------------|--------------------------|
| NS | 2FT | L18 | 19.2W | 2589.91 lm | 134.89 lm/W | 2646.68 lm | 137.84 lm/W | 2676.42 lm | 139.39 lm/W | 2703.46 lm | 140.80 lm/W |
| | | L27 | 29.7W | 4060.03 lm | 136.70 lm/W | 4149.05 lm | 139.69 lm/W | 4195.55 lm | 141.26 lm/W | 4379.70 lm | 147.46 lm/W |
| | | L36 | 37.26W | 5093.57 lm | 136.70 lm/W | 5205.22 lm | 139.70 lm/W | 5263.70 lm | 141.27 lm/W | 5494.46 lm | 147.46 lm/W |
| | 4FT | L27 | 29.9W | 3990.12 lm | 133.44 lm/W | 4090.71 lm | 136.81 lm/W | 4141.02 lm | 138.49 lm/W | 4191.30 lm | 140.17 lm/W |
| | | L36 | 39.33W | 5294.42 lm | 134.61 lm/W | 5427.90 lm | 138 lm/W | 5494.63 lm | 139.70 lm/W | 5561.37 lm | 141.40 lm/W |
| | | L54 | 57.36W | 7739.06 lm | 134.92 lm/W | 7934.18 lm | 138.32 lm/W | 8031.72 lm | 140.02 lm/W | 8129.27 lm | 141.72 lm/W |
| | 8FT | L72 | 76.48W | 10318.48 lm | 134.91 lm/W | 10855.17 lm | 141.93 lm/W | 10988.58 lm | 143.67 lm/W | 11118.53 lm | 145.37 lm/W |
| | | L27 | 29.9W | 4265.07 lm | 142.64 lm/W | 4363.31 lm | 145.93 lm/W | 4416.89 lm | 147.72 lm/W | 4466.17 lm | 149.37 lm/W |
| | | L36 | 39.33W | 5610.21 lm | 142.64 lm/W | 5739.43 lm | 145.93 lm/W | 5809.92 lm | 147.72 lm/W | 5874.73 lm | 149.37 lm/W |
| | | L54 | 57.81W | 8246.30 lm | 142.64 lm/W | 8436.25 lm | 145.93 lm/W | 8539.87 lm | 147.72 lm/W | 8634.85 lm | 149.36 lm/W |
| | | L72 | 78.2W | 11025.47 lm | 141 lm/W | 11279.45 lm | 144.23 lm/W | 11418 lm | 146.01 lm/W | 11545 lm | 147.63 lm/W |
| | | L108 | 105.4W | 14888.09 lm | 141.25 lm/W | 15231.07 lm | 144.50 lm/W | 15418.14 lm | 146.28 lm/W | 15589.62 lm | 147.90 lm/W |
| | | L144 | 140.53W | 19850.02 lm | 141.25 lm/W | 20307.54 lm | 144.50 lm/W | 20557.38 lm | 146.28 lm/W | 20783.81 lm | 147.89 lm/W |


NS LED

ORDERING INFORMATION

EXAMPLE: NS-4-L36-40K-UNV

| MODEL | LENGTH | | LED | COLOR TEMP. | EFFICACY | CRI | |
|-------|--------|--|---|--|---|--|---|
| NS | 2 | 2' Length ³ | (Blank) Wiring for Individual mount (Std.) | L18 18W LED | -27K 2700K ⁸ -30K 3000K -35K 3500K -40K 4000K -50K 5000K | (Blank) HE Standard High Efficacy  | (Blank) C9 80+ CRI 90+ CRI ⁹ |
| | 4 | 4' Length | | L27 27W LED L36 36W LED L54 54W LED L72 72W LED | | | |
| | 8 | 8' Length ¹ | | L27 27W LED L36 36W LED L54 54W LED L72 72W LED L108 108W LED L144 144W LED | | | |
| | | * Number of circuit(s) should be determined by the customer prior to ordering the continuous run considering the AC input voltage and total run wattage. | | | | | |
| | | | | * Contact factory for custom wattage or lumen requirement. | | | |

| VOLTAGE | MOUNTING | FIXTURE FINISH | CORD FINISH (for pendant) |
|--|--|---|------------------------------------|
| UNV 120-277V (Std.) 120 120V 277 277V 347 347V 480 480V | (Blank) Ceiling Mount VH V-Hook CHxx Chain for use with V-hook (xx=length) ACxx Adjustable Aircraft Cable w/ Canopy (* xx = Specify length (48 or 96)) SH-3/8-xx 3/8" IPS STEM w/ Canopy SH-1/2-xx 1/2" IPS STEM w/ Canopy (* xx = 18, 24, 36, 48 inches) IDS T-Bar Clip for Surface Mount | (Blank) Semi-Glossy White (Std.) *BK Black (RAL#9011) **CC Custom Color ¹⁰ *AMB Anti-Microbial Coating (Matte Skye White) | (Blank) White (Std.) *BKC Black |
| * Non-standard finish with extra charge. ** Additional charge & set up fee. | | | |

| CANOPY FINISH (for pendant) | CEILING TYPE (for pendant) | SUSPENSION LENGTH | LED DRIVER ⁴ |
|--|---|--|---|
| (Blank) White (Std.) *BC Black Canopy *SC Silver Canopy **CSS Custom Canopy Color (White is Std.) * Non-standard finish with extra charge. ** Additional charge & set up fee. | X1 15/16" grid T-bar ceiling X2 Hard ceiling X3 Sloped Hard ceiling X4 9/16" T-bar ceiling | AC48 Adjustable Aircraft Cable Canopy 48"L AC96 Adjustable Aircraft Cable Canopy 96"L ST24 Stem Canopy 24"L ST48 Stem Canopy 48"L * Contact factory for custom length. | GR Generic, 0-10V 10% dim (Std.) DM1 Generic 0-10V 1% dim PH Philips Xitanium, 0-10V 1% dim OS Osram Optotronic, 0-10V 10% dim OS1 Osram Optotronic, 0-10V 1% dim SD40 40% / 100% Bi-Level Step dim (PH only) SDXX XX% / 100% Bi-Level Step dim (Specify XX : 10% ~ 70%) (PH only) TDM Triac Dim. (120V only) TD30/70 30% / 70% / 100% Tri-Level Step dim (PH only) TDXX/YY XX% / YY% / 100% Tri-Level Step dim (Specify XX, YY : 10% ~ 70%) (PH only) EC eldoLED ECOdrive 0-10V natural dim to 1% (Hybrid HydraDrive) ES566 eldoLED SOLOdrive Natural Dimming to dark, 0-10V, 100% ~ 0.1% dim LDE1 Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim ELV ELV compatible (reverse-phase or trailing-edge), (120V only) PHSR Philips Xitanium Sensor-Ready, Dali 5%~100% dim PHDL Philips Xitanium DALI driver, Dim to 5% TRIOT Tridonic IoT ready, 1-100% dim via Smart Module Interface (SMI), automated dimming/lighting controls via Enlighted Sensor Interface ND Driver prewired for non-dimming applications DIMT Tri-mode dimming (Triac, ELV, 0-10V) LTEA2W Hi-lume 1% 2-wire LED driver (120V forward phase only)  BLT Bluetooth Mesh System (contact factory for more information) |

NS LED

| OPTIONS | |
|---|--|
| EMG8 EMG15 EMG20 EMG25 ELCU-200 GTD GTD10DIM | 1296 LUMEN EM Battery Backup (CEC Compliant EM) ^{2,6} 2430 LUMEN EM Battery Backup (CEC Compliant EM) ^{2,6} 3240 LUMEN EM Battery Backup (CEC Compliant EM) ^{2,6} 4050 LUMEN EM Battery Backup (CEC Compliant EM) ^{2,6} Fail-to-on Emergency lighting, UL924 ⁷ Bodine Generator Transfer Device Bodine Generator Transfer Device (0-10VDC Dimmer Override) |
| ARRA BAA LOS-502S O7W O10W COC JC4 WGN | Assembled in USA for Buy American Act BAA(Buy American Act) and BABA(Build America Buy America) compliant Fixture external mount, PIR Occupancy Sensor, no dimming support, 120/277V with standard cone shape lens (15ft) with 1.18" extension joint. Adjustable through a dip switch Optional 7 Years Limited Warranty ⁵ Optional 10 Years Limited Warranty ⁵ Separated EM feed for City of Chicago code compliance 4" Octagon shape junction box cover plate Narrow Wireguard |

| LIGHTING CONTROL SYSTEM | |
|-------------------------|--|
| PPA102S | <Bluetooth> Bluetooth Powerpack (Consult factory for installation location) |

NOTES:

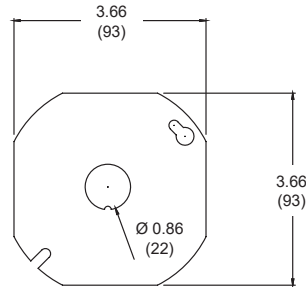
1. Tandem units.
2. Contact factory for more emergency options.
3. For EM options, only EMG5 and EMG8 are available.
4. Refer to Table1 to find compatible dimmer switch.
5. This limited warranty covers electrical parts only and does not apply to labor, equipment lease, or defect from improper installation or operation. (EM battery backup does not included)
6. Not available with 347V and 480V.
7. Shipped separately.
8. Available with C9 (90+ CRI) only.
9. Lumen per watt is around 15% less than standard CRI (80+).
10. Refer to color chart (RAL and/or Cardinal) in the separate attachment and indicate color code.

Specifications: NS

2FT Length: 24 (610)
 Weight: 4.92 lbs (2.23 kg)
 4FT Length: 48 (1219)
 Weight: 7.12 lbs (3.23 kg)
 8FT Length: 96 (2439)
 Weight: 9.99 lbs (4.53 kg)

 Width: 3-1/4 (82)
 Depth: 2 (45)

All dimensions are in inches (millimeters).



JC4 : Octagon cover plate



OUTPUT CURRENT

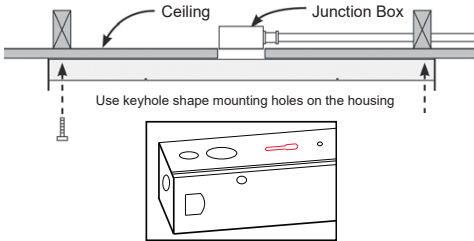
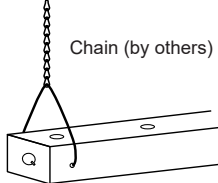
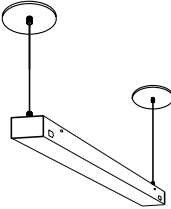
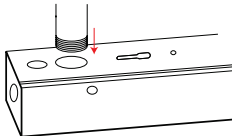

| | | Bi-Level | | Tri-Level (Default) | |
|-------|-------|--------------|---------|---------------------|---------|
| SW1 | SW2 | Config Range | Default | Config Range | Default |
| Close | Open | 10% - 70% | 40% | 10% - 70% | 30% |
| Open | Close | 10% - 70% | 40% | 10% - 70% | 70% |
| Close | Close | 100% | 100% | 100% | 100% |
| Open | Open | 0% | 0% | 0% | 0% |

COMPATIBLE DIMMER SWITCH (TABLE 1)

| Model # | Brand | Compatible Dimmer Switch | | | |
|--|-------------------|--------------------------|--|-----------|--|
| GR, PH | Philips Xitanium | <Leviton> | IllumaTech IP7 series | | |
| | | <Lutron> | Visit www.lutron.com/advance for a list of dimmers (Mark VII) that will work with this driver. | | |
| | | <Philips> | Sunrise : SR1200ZTUNV | | |
| OS, OS1 | Osram Optotronic | <Osram> | ZBHA-CLM DIM (NAMED: 45678), 45561 - LC-SL3W-TVWBX/UNV | | |
| | | <Encelium EMS> | EN-LCM-1R10V-GB2-BK, EN-LCM-1R10V-GB2-BK/DR, EN-ALC-1R10V-GB2-BK, EN-ALC-1R10V-GB2-BK-DR | | |
| | | <Leviton> | IP710-DLX | | |
| | | <Lutron> | DVTV-XX | | |
| | | <Wattstopper> | ADF-120277, FD-301, FSP-202 | | |
| | | <Synergy> | ISD BC | | |
| | | <Busch-Jaeger> | 2112U-101 | | |
| ES566 | eldoLED SOLOdrive | <Jung> | 240-10 | | |
| | | <Leviton> | IllumaTech - IP710-DLX | | |
| | | <Lightoller Controls> | ZP600FAM120 | | |
| | | <Merten> | 5729 | | |
| | | <Pass & Seymour> | CD4FB-W | | |
| | | <Wattstopper> | DCLV1 | | |
| | | <Sensor Switch> | nIO EZ | | |
| | | <Synergy> | ISD BC | | |
| | | <ABB> | SD/S 2.16.1 | | |
| | | <Lutron> | Nova T: NTFTV Diva - DVTV-xx, NFTV GRAFIK Eye: GRX-TVI w GRX3503 Energy Savr Node: QSN-4T16-S TVM2 Module | | |
| | | <Crestron> | GLX-DIMFLV8, GLXP-DIMFLV8, GLPAC-DIMFLV4-*, GLPAC-DIMFLV8-*, GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM, DIN-AO8, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV2EX | | |
| | | LDE1 | Lutron Hi-lume 1% EcoSystem | <Lutron> | PowPak Dimming Modules: RMJ-ECO32-DV-B, FCJ/FCJS-ECO 1,2 Energi Savr Node (120V only): QSN-1ECO-S, QSN-2ECO-S GRAFIK Eye QS/Homeworks QS control unit (120V only): QSGRJ-_E(wireless) QSGR-_E Quantum Hub (120V only): QP2-_2C/4C/6C/8C Homeworks QS/myRoom Plus power module (120V only): LQSE-2ECO-D |
| | | PHSR 3 | Philips Xitanium Sensor-Ready | <Illumra> | <u>Single Rocker Self-Powered Light Switch (on/off, dim-up/down)</u> Illumra# ZBT-S1AWH Digi-Key# 1082-1033-ND |
| <u>Dual Rocker Self-Powered Light Switch (on/off, dim-up/down, scene1,2)</u> Illumra# ZBT-S2AWH Digi-Key# 1082-1034-ND | | | | | |
| TDM | KEYSTONE | <Lutron> | Diva DV-600P, SkyLark S-600P, Ariadni AY-600P, Ariadni TG-603P, Maestro MA-600 (Digital), Diva CFL/LED DVCL-153P, Satin Colors DVSC-600P-SW | | |
| | | <Leviton> | 6641, IllumaTech IPI06-1LX, ToggleTouch TGI06-1LW (Digital) | | |
| ELV | KEYSTONE | <Lutron> | MAELV-600BL (Digital), DVELV-300P, SkyLark SELV-300P | | |

NOTES:

- All devices connected to one FCJ/FCJS-ECO will be controlled together. Devices will dim to the same level as the result of a control command.
For more detail on adjusting low-end light level refer to Application Note#556 at www.lutron.com.
- For the Line/Hot (L/H) terminal on the driver, it is preferred not to use the switched hot (red) wire from the control but rather the hot wire directly from the power source.
- Recommended for EasySense System.

| Mounting Options | Image | Ordering Code |
|----------------------------|---|---|
| Surface Mount (Ceiling) |  <p>Ceiling Junction Box</p> <p>Use keyhole shape mounting holes on the housing</p> | (Blank) |
| V-hook for Chain Mount |  <p>Chain (by others)</p> | VH |
| Adjustable Cable Mount |  | ACxx xx = Length of Cable (48 or 96 inches) |
| Stem Mount (w/ Canopy) |  | w/ Canopy HOLE A : 3/8" IPS STEM [Example : SH-3/8-xx(length)] HOLE B : 1/2" IPS STEM [Example : SH-1/2lxx(length)] xx = 18, 24, 36, 48 (inches) |
| T-Bar Surface Mount |  | IDS |

* Cable / Stem mount provided with canopy set