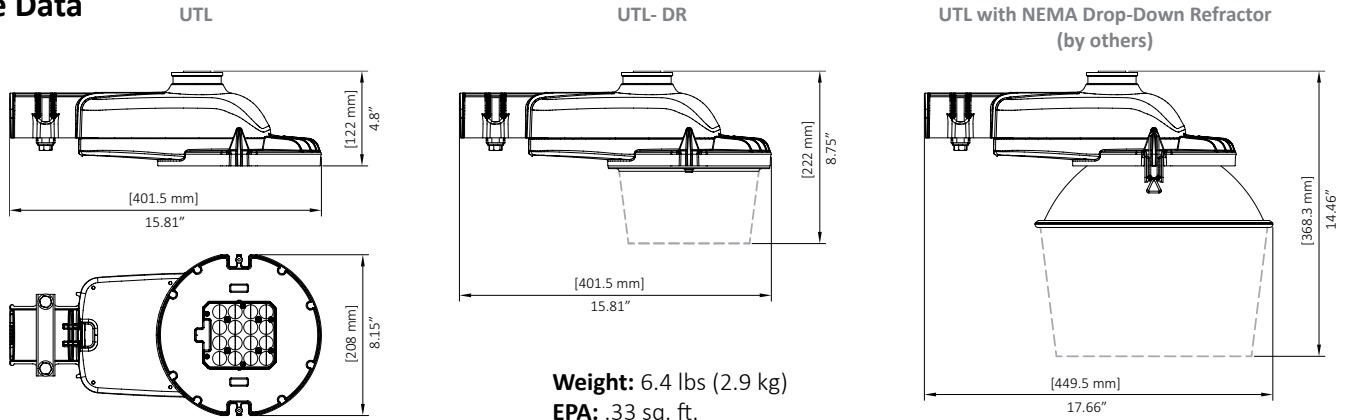


SafeGuard™ Utility Light

Specification Data Sheet

Security, Dusk to Dawn, Street and Area Light Applications

Luminaire Data



Weight: 6.4 lbs (2.9 kg)
EPA: .33 sq. ft.

Ordering Information

Sample Catalog No. UTL1-16J-MV-40K-5-UN-035-PCR7-CR- SP1-WL

| Product | LED Code | Voltage | Color Temperature | Distribution | Finish ¹ | Output Code ² | Options* |
|---------|----------|-------------|-------------------|-----------------------|---------------------|-----------------------------------|---|
| UTL1 | 16J | MV 120-277V | 30K 3000K | 2R Type 2 | UN Unpainted | Refer to page 3 for output levels | PCR7 ⁹ ANSI 7-Wire Photo-Control Receptacle |
| UTL2 | | | 40K 4000K | 3R Type 3 5 Type 5 | GY Gray | | PCR7-CR ³ ANSI 7-Wire Photo-Control Receptacle |
| | | | | | | | CS ² Field Adjustable Output Control. |
| | | | | | | | PCR7-CS ⁴ ANSI 7-wire Photo-control Receptacle with Field Adjustable Output Control. |
| | | | | | | | DR ⁸ Drop-down Refractor (Requires Type 5 optic. Not installed) |
| | | | | | | | CTF ⁵ Color Temperature (CCT) Filter. |
| | | | | | | | SP1 Enhanced Surge Protection, Fail-to-on, 10kV/5kA Rating. |
| | | | | | | | SP2 Extreme Surge Protection, Fail-to-on, 20kV/10kA Rating. |
| | | | | | | | PT6 6' Three-Wire Pigtail |
| | | | | | | | HSS ⁶ House Side Shield |
| | | | | | | | FSS ⁶ Front-Side Shield |
| | | | | | | | SC Shorting Cap (not installed) |
| | | | | | | | LLPCMV Long-Life Twist Lock Photocontrol - MV (not installed) |
| | | | | | | | WL Utility Wattage Label |
| | | | | | | | CF Coastal Finish |
| | | | | | | | RWG Rubber Wildlife Guard |
| | | | | | | | PA18 ⁸ 18" Pipe Arm Wood Pole Bracket (not installed) |
| | | | | | | | PA24 ⁸ 24" Pipe Arm Wood Pole Bracket (not installed) |

Notes:

- Consult factory for other finishes.
- Specified drive current code is the factory set drive current. Optional CS field adjustable output selector enables fixture to be changed in the field to adjust light output for local conditions (not available with PCR7-CR option). Consult factory if wattage limits require a special drive current.
- Control-ready ANSI 7-wire photo-control receptacle. Dimming wires connected to receptacle. Wireless node by others. Not compatible with CS option. **PCR7-CR only available at maximum output code.**
- ANSI 7-wire photo-control receptacle. Dimming wires not connected to receptacle. Field adjustable output selector enables fixture to be changed in the field to adjust light output for local conditions.
- Snap-on color temperature filter. Nominal 2200K effect when used with 3000K CCT LED, nominal 2700K effect when used with 4000K LED. Reduces lumen output by approximately 25%.
- Flush mounted shields. House-side shield cuts light off at ½ mounting height behind luminaire. Front-side shield cuts off light at 1 mounting height in front of luminaire. Factory installed when specified as option. Also available as accessory for field installation.
- Specify GY for gray painted. Refer to Leotek web site for specific mounting details and drawings at <https://leotek.com/lighting-library/>
- Orders that include these items are master packed in single carton.
- Dimming wires not connected to receptacle.

Accessories (Order Separately)

| | |
|-----------------------|--|
| PA18 | 18" Pipe Arm Wood Pole Bracket |
| PA24 | 24" Pipe Arm Wood Pole Bracket |
| HSSUTL16 ⁶ | House Side Shield, Snap-On |
| FSSUTL16 ⁶ | Front Side Shield, Snap-On |
| CTFUTL16 ⁵ | Color Temperature (CCT) Filter |
| RPB-GY ⁷ | Round Pole Horizontal Arm Bracket |
| PTB-GY ⁷ | Pole Top Tenon Horizontal Arm Bracket |
| PTB2-GY ⁷ | Pole Top Tenon Horizontal Arm Bracket (2@180°) |
| WB-GY ⁷ | Wall Horizontal Arm Bracket |
| LLPCMV | Long-Life Twist Lock Photocontrol (MV) |
| DR | Drop-down refractor (requires Type 5 optic) |
| SC | Shorting Cap |

*Shipped installed unless otherwise noted.



Luminaire Specifications

Housing

Low copper content die cast aluminum housing with universal two-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm. One-piece aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. Mounting provisions meet 3G vibration per ANSI C136.31- 2010 Normal Application, Bridge & Overpass. Mounting has leveling adjustment from ± 5° in 2.5° steps. All hardware is stainless steel. Electrical components are accessed without tools via die cast aluminum door with stainless steel quick-release latch. Provided standard with removable polycarbonate wild life guard. For additional protection, optional rubber wildlife guard (RWG) conforms to mast arm. Housing has provision for NEMA drop-down refractor (by others).

Light Emitting Diodes

LEDs produce minimum 70% of initial intensity at 60,000 hours of life per IES recommended lumen maintenance life projection based on 6 times the duration of the collected LM-80 data. For details on IESNA Position on LED Product Lifetime Prediction, refer to PS-10-18. LEDs have correlated color temperature of 3000K (30K), or 4000K (40K) and 70 CRI minimum. LEDs are ROHS compliant, 100% mercury and lead free.

Optional Field-Adjustable Light Output (CS)

LED lumen output can be changed in the field to adjust light output for local conditions using the output selector. Range of continuous dimming is above 10%. Adjustable range shown in performance data table. If both CS output selector and PCR7 receptacle are required, specify "PCR7-CS" (note that dimming wires will not be connected to receptacle).

Color Specifications

| Order Code | Color | RAL # | Pantone Equivalent |
|------------|------------|-------|--------------------|
| UN | Unfinished | N/A | N/A |
| GY | Gray | 7040 | 429C |

Packaging

| Catalog Number | Single Package Size | Single Package Weight | Qty. Per Pallet | Pallet Size | Pallet Weight |
|----------------|--|-----------------------|-----------------|--|------------------|
| UTL | 17.3" (440mm) x 9.4" (240mm) x 6.1" (155mm) | 8.1 lb (3.7 kg) | 130 | 44.9" (1140mm) x 43.3" (1100mm) x 86.6" (2200mm) | 1095 lb (497 kg) |
| UTL-DR | 26.6" (675mm) x 9.8" (250mm) x 6.9" (175mm) | 11 lb (5.0 kg) | 66 | 46.2" (1175mm) x 43.3" (1100mm) x 80.9" (2055mm) | 760 lb (345 kg) |
| UTL-PA18 | 27.5" (700mm) x 9.8" (250mm) x 10.4" (265mm) | 13 lb (5.9 kg) | 42 | 47.2" (1200mm) x 43.3" (1100mm) x 78.1" (1985mm) | 584 lb (265 kg) |
| UTL-PA24 | 27.5" (700mm) x 9.8" (250mm) x 10.4" (265mm) | 13.9 lb (6.3 kg) | 42 | 47.2" (1200mm) x 43.3" (1100mm) x 78.1" (1985mm) | 617 lb (280 kg) |
| UTL-DR-PA18 | 27.5" (700mm) x 9.8" (250mm) x 10.4" (265mm) | 14.5 lb (6.6 kg) | 42 | 47.2" (1200mm) x 43.3" (1100mm) x 78.1" (1985mm) | 650 lb (295 kg) |
| UTL-DR-PA24 | 27.5" (700mm) x 9.8" (250mm) x 10.4" (265mm) | 15.2 lb (6.9 kg) | 42 | 47.2" (1200mm) x 43.3" (1100mm) x 78.1" (1985mm) | 672 lb (305 kg) |
| DR | 9.4" (240mm) x 8.7" (220mm) x 5.1" (130mm) | 1.4 lb (0.65 kg) | 192 | 43.3" (1100mm) x 43.3" (1100mm) x 86.2" (2190mm) | 344 lb (156 kg) |
| PA18 | 21.5" (547mm) x 9" (230mm) x 3" (75mm) | 3 lb (1.4 kg) | 216 | 43.3" (1100mm) x 43.3" (1100mm) x 84.8" (2155mm) | 705 lb (320 kg) |
| PA24 | 26.8" (682mm) x 9" (230mm) x 3" (75mm) | 3.7 lb (1.7 kg) | 162 | 45" (1145mm) x 43.3" (1100mm) x 84.8" (2155mm) | 650 lb (295 kg) |

Quality Control

Every luminaire is performance tested before and after a 2-hour burn-in period. Assembled in the USA.

Optical Systems

Micro-lens optical systems produce IESNA Type 2, Type 3, or Type 5 distributions and are fully sealed to maintain an IP66 rating. Luminaire produces 0% total lumens above 90° (BUG Rating, U=0). Optional acrylic drop-down refractor (DR). Optional house side shield cuts light off at ½ mounting height behind luminaire. Front side shield cuts light off at approximately 1 mounting height in front of the luminaire (street side). All shields are field installable without tools.

Electrical

Rated life of electrical components is 100,000 hours. Uses isolated power supply that is 1-10V dimmable. Power supply is wired with quick-disconnect terminals. Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Terminal block accommodates 6 to 14 gauge wire. Standard surge protection 4kV complies with ANSI 1.2/50µs Combination Wave. Optional surge protection SP1 complies with IEEE/ANSI C62.41 Category C High, 10kV/5kA and SP2 complies with ANSI C136.2-2015, 20kV/10kA.

Controls

3-Wire photocontrol receptacle is standard. ANSI C136.41 7-wire PCR7-CR photocontrol receptacle is optional. Dimming leads factory wired to the receptacle for control-ready luminaire. Receptacle has tool-less rotatable base. Wireless control module provided by others. If PCR7-CS is specified, dimming wires are not wired to photocell receptacle.

Finish

Optional painted housing receives a durable, fade resistant polyester powder coat finish with 3.0 mil nominal thickness.

Listings/Ratings/Labels

Luminaires are UL listed for use in wet locations in the United States and Canada. All electronic components inside of the luminaire are NRTL damp location rated per ANSI 136.37-2011 Ingress Protection standard. 3000K Product without DR option is International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C. Design Lights Consortium™ Qualified Product. Consult DLC QPL for listings.

Photometry

Luminaire photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures.

Warranty

5-year limited warranty is standard on luminaire and components. See Leotek.com for warranty details.

Vandal Resistance

Housing and LED optic rated to IK10.

Standards

Luminaire complies with:
 ANSI: C136.2, C136.3, C136.6, C136.10, C136.13, C136.15, C136.22, C136.31, C136.35, C136.37, C136.41, C62.41, C78.377, C82.77
 Other: FCC 47 CFR, IEC 60598, ROHS II, UL 1449, UL 1598

Optical Performance

All data nominal. IES files for all CCTs available at leotek.com.

| 3000K | | | | | | |
|--------------|-------------|--------------------|------------------------------------|-----------------|---------------------------|---|
| Product | Output Code | System Wattage (W) | Delivered Lumens ¹ (Lm) | Efficacy (Lm/W) | System Drive Current (mA) | Field Adjustable Output Range (CS Option) |
| UTL1 | 030 | 21 | 3203 | 153 | 205 | ↑ 5 |
| | 050 | 34 | 4844 | 142 | 330 | 4 |
| | 055 | 38 | 5396 | 142 | 370 | 3 |
| | 065 | 46 | 6460 | 140 | 450 | 2 |
| | 075 | 54 | 7471 | 138 | 530 | ↓ 1 |
| UTL1 with DR | 030 | 21 | 3071 | 146 | 205 | ↑ 5 |
| | 050 | 34 | 4650 | 137 | 330 | 4 |
| | 055 | 38 | 5181 | 136 | 370 | 3 |
| | 065 | 46 | 6204 | 135 | 450 | 2 |
| | 075 | 54 | 7177 | 133 | 530 | ↓ 1 |

| 4000K | | | | | | |
|--------------|-------------|--------------------|------------------------------------|-----------------|---------------------------|---|
| Product | Output Code | System Wattage (W) | Delivered Lumens ¹ (Lm) | Efficacy (Lm/W) | System Drive Current (mA) | Field Adjustable Output Range (CS Option) |
| UTL1 | 035 | 21 | 3328 | 158 | 205 | ↑ 5 |
| | 050 | 34 | 5021 | 148 | 330 | 4 |
| | 055 | 37 | 5590 | 151 | 370 | 3 |
| | 065 | 46 | 6687 | 145 | 450 | 2 |
| | 075 | 54 | 7731 | 143 | 530 | ↓ 1 |
| UTL1 with DR | 035 | 21 | 3150 | 150 | 205 | ↑ 5 |
| | 050 | 34 | 4771 | 140 | 330 | 4 |
| | 055 | 37 | 5316 | 144 | 370 | 3 |
| | 065 | 46 | 6367 | 138 | 450 | 2 |
| | 075 | 54 | 7365 | 137 | 530 | ↓ 1 |

Notes:

1 Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.

Optical Performance

All data nominal. IES files for all CCTs available at leotek.com.

| 3000K | | | | | | |
|--------------|-------------|--------------------|------------------------------------|-----------------|---------------------------|---|
| Product | Output Code | System Wattage (W) | Delivered Lumens ¹ (Lm) | Efficacy (Lm/W) | System Drive Current (mA) | Field Adjustable Output Range (CS Option) |
| UTL2 | 080 | 60 | 7914 | 132 | 575 | ↑ 4 |
| | 085 | 65 | 8399 | 129 | 615 | 3 |
| | 090 | 69 | 8780 | 127 | 660 | 2 |
| | 095 | 75 | 9321 | 124 | 700 | ↓ 1 |
| UTL2 with DR | 080 | 60 | 7427 | 124 | 575 | ↑ 4 |
| | 085 | 65 | 7768 | 120 | 615 | 3 |
| | 090 | 69 | 8152 | 118 | 660 | 2 |
| | 095 | 75 | 8493 | 113 | 700 | ↓ 1 |

| 4000K | | | | | | |
|--------------|-------------|--------------------|------------------------------------|-----------------|---------------------------|---|
| Product | Output Code | System Wattage (W) | Delivered Lumens ¹ (Lm) | Efficacy (Lm/W) | System Drive Current (mA) | Field Adjustable Output Range (CS Option) |
| UTL2 | 080 | 60 | 8330 | 139 | 575 | ↑ 4 |
| | 085 | 65 | 8786 | 135 | 615 | 3 |
| | 090 | 67 | 9016 | 135 | 660 | 2 |
| | 095 | 74 | 9656 | 130 | 700 | ↓ 1 |
| UTL2 with DR | 080 | 60 | 7698 | 128 | 575 | ↑ 4 |
| | 085 | 65 | 8119 | 125 | 615 | 3 |
| | 090 | 67 | 8332 | 124 | 660 | 2 |
| | 095 | 74 | 8923 | 121 | 700 | ↓ 1 |

Notes:

1 Nominal lumens. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.

BUG Ratings: 3000K (30K)*

| | | Type 2R | Type 3R | Type 5 | DR (Type 5) |
|--------------------|-------------|------------|------------|------------|-------------|
| Product & LED Code | Output Code | BUG Rating | BUG Rating | BUG Rating | BUG Rating |
| UTL1 | 030 | B1-U0-G1 | B1-U0-G1 | B2-U0-G1 | B2-U3-G1 |
| | 050 | B1-U0-G1 | B1-U0-G1 | B3-U0-G1 | B3-U3-G2 |
| | 055 | B2-U0-G2 | B1-U0-G1 | B3-U0-G1 | B3-U3-G2 |
| | 065 | B2-U0-G2 | B1-U0-G1 | B3-U0-G1 | B3-U3-G2 |
| | 075 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U3-G2 |

*All data nominal. IES files for all CCTs are available at leotek.com.

BUG Ratings: 4000K (40K)*

| | | Type 2R | Type 3R | Type 5 | DR (Type 5) |
|--------------------|-------------|------------|------------|------------|-------------|
| Product & LED Code | Output Code | BUG Rating | BUG Rating | BUG Rating | BUG Rating |
| UTL1 | 035 | B1-U0-G1 | B1-U0-G1 | B2-U0-G1 | B2-U3-G1 |
| | 050 | B2-U0-G2 | B1-U0-G1 | B3-U0-G1 | B3-U3-G2 |
| | 055 | B2-U0-G2 | B1-U0-G1 | B3-U0-G1 | B3-U3-G2 |
| | 065 | B2-U0-G2 | B1-U0-G1 | B3-U0-G2 | B3-U3-G2 |
| | 075 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U3-G2 |

*All data nominal. IES files for all CCTs are available at leotek.com.

BUG Ratings: 3000K (30K)*

| | | Type 2R | Type 3R | Type 5 | DR (Type 5) |
|--------------------|-------------|------------|------------|------------|-------------|
| Product & LED Code | Output Code | BUG Rating | BUG Rating | BUG Rating | BUG Rating |
| UTL2 | 080 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U3-G2 |
| | 085 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U3-G3 |
| | 090 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U3-G3 |
| | 095 | B2-U0-G2 | B2-U0-G2 | B4-U0-G2 | B3-U3-G3 |

*All data nominal. IES files for all CCTs are available at leotek.com.

BUG Ratings: 4000K (40K)*

| | | Type 2R | Type 3R | Type 5 | DR (Type 5) |
|--------------------|-------------|------------|------------|------------|-------------|
| Product & LED Code | Output Code | BUG Rating | BUG Rating | BUG Rating | BUG Rating |
| UTL2 | 080 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U3-G2 |
| | 085 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U3-G2 |
| | 090 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U3-G2 |
| | 095 | B2-U0-G2 | B2-U0-G2 | B4-U0-G2 | B3-U3-G3 |

*All data nominal. IES files for all CCTs are available at leotek.com.