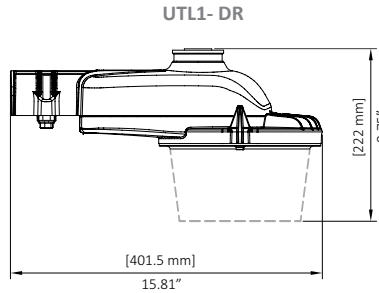
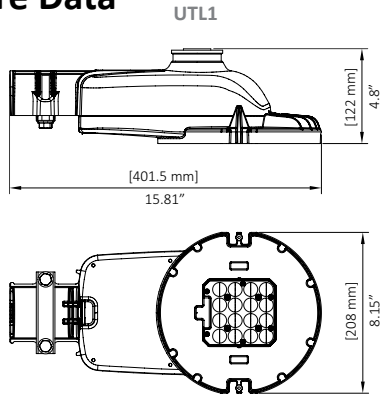
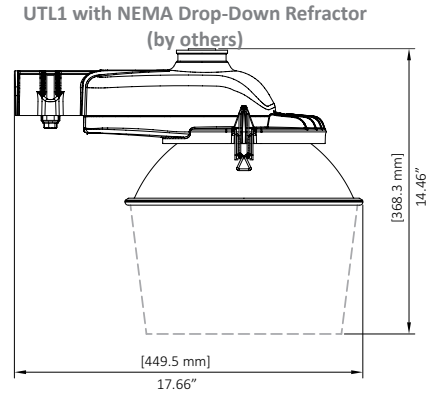


SafeGuard™ Utility Light
Specification Data Sheet
Security, Dusk to Dawn, Street and Area Light Applications

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 40K 4000K	2R Type 2 3R Type 3 5 Type 5	UN Unpainted GY Gray	Refer to page 3 for output levels	PCR7-CR³ ANSI 7-Wire Photo-Control Receptacle CS² Field Adjustable Output Control. PCR7-CS⁴ ANSI 7-wire Photo-control Receptacle with Field Adjustable Output Control. DR⁸ Drop-down Refractor (Requires Type 5 optic. Not installed) CTF⁵ 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 HSS⁶ House Side Shield FSS⁶ 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 PA18⁸ 18" Pipe Arm Wood Pole Bracket PA24⁸ 24" Pipe Arm Wood Pole Bracket

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.
- 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.

Accessories (Order Separately)

PA18⁸	18" Pipe Arm Wood Pole Bracket
PA24⁸	24" Pipe Arm Wood Pole Bracket
HSSUTL16⁶	House Side Shield, Snap-On
FSSUTL16⁶	Front Side Shield, Snap-On
CTFUTL16⁵	Color Temperature (CCT) Filter
RPB-GY⁷	Round Pole Horizontal Arm Bracket
PTB-GY⁷	Pole Top Tenon Horizontal Arm Bracket
PTB2-GY⁷	Pole Top Tenon Horizontal Arm Bracket (2@180°)
WB-GY⁷	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 90% 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).

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. Standard finish tested to withstand 1000 hours in salt spray exposure per ASTM B117 and Coastal Finish per ASTM G85. Finish meets scribe creepage rating 8 per ASTM D1654. Finish tested 500 hours in UV exposure per ASTM G154 and meets ASTM D523 gloss retention.

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.

Photometry

Luminaires 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

Lumen Maintenance per IES TM21-11 Calculation

Model Number	60,000 Hours*	80,000 Hours	100,000 Hours
UTL1	>XX%	>XX%	>XX%

*Calculation based on IES position statement on Lumen Maintenance Life Projections

Color Specifications

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

Packaging

Cat. Number	Single Package Size/Weight	Qty. Per Pallet	Pallet Size/Weight
UTL	XXX	XXX	XXX
UTL-DR	XXX	XXX	XXX
UTL-PA18	XXX	XXX	XXX
UTL-PA24	XXX	XXX	XXX
UTL-DR-PA18	XXX	XXX	XXX
UTL-DR-PA24	XXX	XXX	XXX
DR	XXX	XXX	XXX

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	30	21	3203	151	205	↑ 5
	50	34	4844	144	330	4
	55	38	5396	144	370	3
	65	46	6460	140	450	2
	75	54	7471	138	530	↓ 1
UTL1 with DR	30	21	3024	143	205	↑ 5
	50	34	4580	136	330	4
	55	38	5103	136	370	3
	65	46	6112	132	450	2
	75	54	7071	131	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	35	21	3328	156	205	↑ 5
	50	34	5021	149	330	4
	55	37	5590	149	370	3
	65	46	6687	146	450	2
	75	54	7731	143	530	↓ 1
UTL1 with DR	35	21	3150	148	205	↑ 5
	50	34	4771	142	330	4
	55	37	5316	142	370	3
	65	46	6367	139	450	2
	75	54	7365	137	530	↓ 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	30	B1-U0-G1	B1-U0-G1	B2-U0-G1	B2-U3-G1
	50	B1-U0-G1	B1-U0-G1	B3-U0-G1	B3-U3-G2
	55	B2-U0-G2	B1-U0-G1	B3-U0-G1	B3-U3-G2
	65	B2-U0-G2	B1-U0-G1	B3-U0-G1	B3-U3-G2
	75	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	35	B1-U0-G1	B1-U0-G1	B2-U0-G1	B2-U3-G1
	50	B2-U0-G2	B1-U0-G1	B2-U0-G1	B3-U3-G2
	55	B2-U0-G2	B1-U0-G1	B3-U0-G1	B3-U3-G2
	65	B2-U0-G2	B1-U0-G1	B3-U0-G2	B3-U3-G2
	75	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.