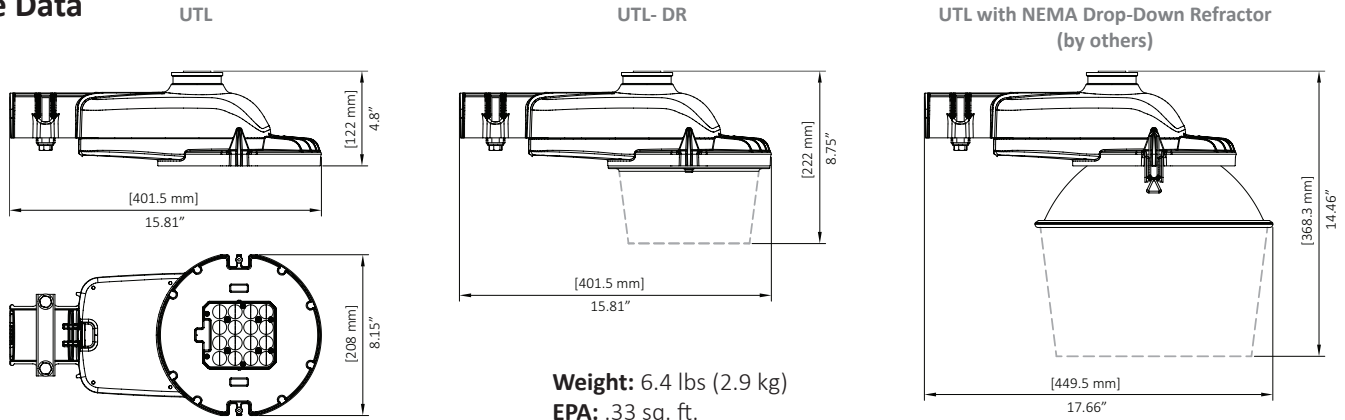


SafeGuard™ Utility Light

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).

Quality Control

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)

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	38	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	38	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	69	9016	135	660	2
	095	75	9656	130	700	↓ 1
UTL2 with DR	080	60	7698	128	575	↑ 4
	085	65	8119	125	615	3
	090	69	8332	124	660	2
	095	75	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.