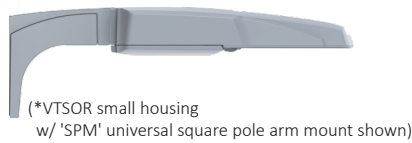


VersaTEK Small LED OFF-Roadway Series

VTSOR Specification Data Sheet

Luminaire Data

Weight	21.3 lbs [9.7 kg] ('SF', 'SFH', 'SFC' mount)
	19.6 lbs [8.9 kg] ('SPM' mount)
	20.5 lbs [9.3 kg] ('RPM' mount)
	20.7 lbs [9.4 kg] ('MAF' mount)
	20.7 lbs [9.4 kg] ('ASPM' mount)
	21.3 lbs [9.7 kg] ('ARPM' mount)



(*VTSOR-72A-SF small housing w/ 'SF' slipfitter mount & optional 'PCR7CR' shown)

Ordering Information

Sample Catalog No. VTSOR-36A-MV-50K7-WR-GY-P9-MAF-PCR7CR-TB-SP2-WL1-PWRD-SF277-BABA

Product*	LED Code	Voltage	Color Temp CRI	Optical Distribution	Finish*	Performance Code*	Mounting Options
VTSOR VersaTEK Small Off-Roadway	36A 72A 36 or 72 LEDs Gen-A	MV 120-277V HV 347-480V	27K7 2700K, 70CRI 30K7 3000K, 70CRI 40K7 4000K, 70CRI 50K7 5000K, 70CRI 30K8¹ 3000K, 80CRI 40K8¹ 4000K, 80CRI 50K8¹ 5000K, 80CRI	NR Narrow Roadway MR Medium Roadway WR Wide Roadway T2R Type-2R T2F Type-2F T3R Type-3R T3F Type-3F T4R Type-4R T4F Type-4F T5 Type-5 ORR Optics Rotated Right ORL Optics Rotated Left	BK Black DB1 Dark Bronze (RAL8019) WH White GY Gray CF Coastal Finish *Consult factory for custom finish options, pricing & leadtimes.	P1 P2 P3 P4 P5 P6 P7 P8 P9* P11 *36A' is P9 max (see pages 3-6 for details)	SF² Slipfitter w/ Wire Leads (in UL splice compartment) SFH³ Slipfitter w/ S/O Cord Exiting Housing Bottom (3-wire S/O cord, 16AWG, 4' exit length) SFC³ Slipfitter w/ S/O Cord Exiting Center of Fitter (3-wire S/O cord, 16AWG, 4' exit length) SPM Universal Square Pole Arm Mount RPM Universal Round Pole Arm Mount MAF Horizontal Mast Arm Fitter (compatible w/ 1-5/8", 2-3/8" and 3" O.D. tenons) ASPM Universal Square Pole Adjustable Arm Mount ARPM Universal Round Pole Adjustable Arm Mount

Driver* & Control Options (*0-10V drivers are standard)	General Options	General Accessories*
D4I^{4,8} DALI D4I Driver TLR4U^{4,5,8} DALI 4-PIN Twist Lock Receptacle (upper housing receptacle location) TLR4L^{4,5,8} DALI 4-PIN Twist Lock Receptacle (lower driver door receptacle location) PCR7CR^{4,10} ANSI 7-wire Control Ready Receptacle SC Shorting Cap (factory installed) LLPC⁶ Long Life Photocontrol PS⁷ Field Adjustable Performance Selector PND1⁸ Part Night Dimming V1 PND2⁸ Part Night Dimming V2 PND3⁸ Part Night Dimming V3 MSL3^{9,10} Motion Sensor w/ L3 Lens MSL7^{9,10} Motion Sensor w/ L7 Lens MSL3P^{9,11} Motion Sensor w/ L3 Lens w/ PCR7 MSL7P^{9,11} Motion Sensor w/ L7 Lens w/ PCR7 LEOLink ILS™ Intelligent Lighting System¹² * See pg.12 for additional LEOLink ordering & system details * (refer to LEOLink ILS specification sheets for complete specification & ordering information)	AIM45¹³ Slipfitter Factory Pre-aimed at 45° SS Slipfitter Set Screw (replaces standard slipfitter set bolts) TFL Tamper free latch (driver electrical door) TB² 3-position Terminal Block SP2¹⁴ 20kV/10kA Extreme Surge, Fail-to-On LSSP2 20kV/10kA Extreme Surge, Fail-to-Off WL Wattage Label, ANSI C136.15-2015 compliant WL1 Wattage Label, ANSI C136.15-2020 compliant DSC Optional Driver Door Safety Cable PWRD Power Door Option (tool-free removable door w/ serviceable electrical items) SFXXX¹⁵ Single Fuse ('XXX' = specify 120, 277, 347V) DFXXX¹⁵ Double Fuse ('XXX' = specify 208, 240, 480V) 5WSO¹⁶ 5-wire S/O Cord (16AWG, 4' length w/ dimming leads) SOXXYY¹⁷ Special S/O AWG & Cord Length in Feet ('XX' = specify AWG 12, 14 or 16) ('YY' = specify S/O cord length 06, 08, 10, 15, 25) BLS¹⁸ Enhanced Back Light Shield (factory installed) VHS 80 Degree Cutoff Shield (factory installed) FSS¹⁸ Front Side Shield (factory installed) CSS¹⁸ Cul-de-sac Shield (factory installed) BABA¹⁹ Build America, Buy America Act Compliant (meets Oct. 1, 2026 final US assembly, 55% content material requirements)	Shield Accessories TBS-VTS Top, Bottom Shield LRS-VTS Left, Right Side Shield 4SS-VTS 4-sided Shield BDS-VTS Barn Door Shield VS-VTS Poly Vandal Shield WG-VTS Wire Guard BLS-VTSXXA^{18,20} Enhanced Backlight Shield (snap-on) VHS-VTSXXA²⁰ 80-Degree Cutoff Shield (snap-on) FSS-VTSXXA^{18,20} Front Side Shield (snap-on) CSS-VTSXXA^{18,20} Cul-de-sac Shield (snap-on) ('XXA' = specify 36A or 72A LED Code) BSK Bird Deterrent Spider Kit Controls Accessories LLPCM/V Long Life Photocontrol MV LLPCH/V Long Life Photocontrol HV FSIR100 MS Configuration Tool * Accessories are ordered & shipped separately, not to be included in the luminaire's catalog number. (requires field installation)

1. 80CRI option only available in 3000K, 4000K & 5000K CCTs and may have longer leadtimes (contact factory).

2. 'TB' Terminal Block is not available for use with the 'SF' Slipfitter mounting option. 3. 'SFH' & 'SFC' options include 16AWG 3-wire S/O cord w/ a 4' exit length & last 6" of insulation removed.

4. For full 100% DALI functionality a 'PCR7CR', 'TLR4U' or 'TLR4L' must be selected w/ 'D4I' DALI driver option. DALI compatible node or sensor (by others). 'D4I' DALI driver not compatible w/ 'NB01P05/10' smart controller.

5. 'TLR4U' & 'TLR4L' twist lock receptacle options requires 'D4I' driver option to be selected.

6. 'LLPC' requires 'PCR7CR' option to be selected (does not ship installed, included w/ luminaire). 7. 'PS' Performance Selector enables field adjustable light output dimming control from specified Performance Code, not compatible with DALI (see pg.7 for details).

8. 'PND' options only available w/ 'MV' 120-277V (contact factory for 'HV' 347-480V availability). 9. Motion Sensor options only available w/ 'SPM', 'RPM' and 'MAF' horizontal mounting options.

10. 'MSL3', 'MSL7' motion sensors require secondary controls for ON/OFF capability (ex. time clock or 0-10V by others). Contact factory for Motion Sensor availability w/ 'PCR7CR' control ready receptacle for use with wireless 7-PIN control node (by others).

11. 'MSL3P', 'MSL7P' motion sensors includes a PCR7 photocontrol receptacle for use with a twist lock photocontrol for ON/OFF capability for use with our 'LLPC' or photocontrol by others, PINs 6 & 7 are not wired for controls, not compatible w/ wireless nodes).

12. 'NB01P05/10' requires 'PCR7CR' option, only available in 'MV' 120-277V (contact factory for 'HV' 347-480V). 'NB01P05/10' is a cellular based NEMA 7-PIN Smart Controller. RenAI subscription and network data plan required (see pg. 12 for details).

13. Slipfitter options 'SF', 'SFC', 'SFH' ship pre-aimed at 45° from the factory if 'AIM45' is specified. 14. 10kV/5kA surge, fail-to-on is included standard ('SP1'). 15. For single or double fusing, 'XXX' must specify required voltage.

16. '5WSO' only available with 'SFC' & 'SFH' options. Not available w/ 'PCR7CR', 'PS', 'PND', 'D4I', 'TLR4U', 'TLR4L' options. 17. 'SOXXYY' option, 'XX' & 'YY' must specify S/O cord AWG & length (only available w/ SO cord mounting options).

18. 'BLS-VTS', 'FSS-VTS' & 'CSS-VTS' shields are not available for use with the 'T5' Type-5 optical distribution.

19. 'BABA' option must be specified to meet Oct. 1, 2026 Build America, Buy America Act (BABA) guidelines. Failure to specify the 'BABA' ordering code will result in receiving non-BABA compliant product (w/ no recourse for an RMA, product exchange or refund).

20. For snap-on shield accessory items, 'XXA' must specify 36A or 72A LED Code to receive the proper quantity of shields required for field installation.



Luminaire Specifications

Housing & Construction

Rugged grade A360 die-cast aluminum housing, and door frame (<0.6% copper). Housing includes integral heatsink fins and (3) pass-thru convective cooling slots between the LED array heatsink and driver compartment for enhanced cooling and maximum thermal management to maximize LED platform and electrical component lifetime. Electrical access door provides access to electrical components via two corrosion resistant stainless-steel tool-free latches (tamper free latch option 'TFL' is available). Door can be removed without the use of tools. Electrical door comes standard with an integral VersaKICK 'kickstand' to quickly and easily prop open the door to allow for frustration free installation or maintenance. Optional 'PWRD' Power Door mounts all serviceable electrical components on the door with tool-free removal for easy field maintenance or replacement. Internal bubble level standard for leveling during install. All exposed hardware and fasteners are corrosion resistant stainless-steel. Entire luminaire is IP66 rated.

Light Emitting Diodes

Hi-flux/Hi-power 5050 LEDs provide 90% lumen maintenance (L90) at 95,000 hours for '72A' optics and at 86,500 hours for '36A' optics (at 25°C per IES TM-21). LEDs are tested in accordance with IES LM-80 testing procedures. IES TM-21 lumen maintenance life projection is based on 6X the duration of the LED's IES LM-80 performance data (estimates beyond 6X are extrapolated per TM-21). Available CCTs are 2700K, 3000K, 4000K, 5000K at 70 CRI or 80 CRI (2700K is 70 CRI only). LEDs are 100% mercury and lead free.

Site & Area and Wall Mounting Options

All site & area and wall mounting options are constructed of rugged A360 die-cast aluminum. Universal/retrofit square pole 'SPM', round pole 'RPM' and adjustable square 'ASPM', adjustable round 'ARPM' arm mount options can accept bolt spacings from 2.29" to 5.25" and are designed for quick and easy single person installation. Horizontal mast arm fitter 'MAF' is designed to install to horizontal 1-5/8", 2-3/8" and 3" O.D. tenons. Fixed 'WM' and adjustable 'AWM' wall mount options mount to recessed 3" or 4" square or octagonal recessed J-boxes (by others). Surface conduit wall mount options 'WMSC' and 'AWMSC' includes (4) 3/4" NPT thru-wire taps with plugs. All wall mount options include an integral bubble level for ease of installation. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass.

Color Specifications

Order Code	Color	RAL #	Pantone Equivalent
GY	Gray	7040	429C
BK	Black	9004	BLACK 6C
DB1	Dark Bronze	8019	412
WH	White	9003	11-0601

OFF-Roadway Mounting Options

All OFF-Roadway adjustable slipfitter mounting options 'SF', 'SFC' and 'SFH' are rugged A360 die-cast aluminum and includes safety thru-bolt detail if required. Slipfitter 'AIM45' option ships factory preset to a tilt of 45°. Self-centering design feature also assists with leveling during installation. Designed to install to 1-5/8", 2-3/8" and 3" O.D. tenons (by others). Available in (3) wiring configurations ('SF' includes available leads accessed via an integral UL recognized splice compartment, 'SFC' and 'SFH' options include S/O cord exiting the center of the slipfitter or housing bottom). Standard S/O cord configurations ('SFH', 'SFC') are 16AWG 3-wire with an exit length of 4' and last 6" of weatherproof covering removed. Additional wire gauges and lengths available (see 'Ordering Information' for details). Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass.

Optical Systems

All Micro-lens optical systems are fully sealed to maintain an IP66 rating. All Site & Area and OFF-Roadway optical distributions produce 0% total lumens above 90° when installed horizontally (BUG Rating, U=0). Auto Front Row (AFR) optics are designed to enhance light levels at dealership's site perimeter while minimizing wattage and backlight. Multiple glare and light trespass shielding options and accessories are available (see 'Ordering Information' for details).

Photometry

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

Field Adjustability

Optional Performance Selector 'PS' is an integral 8-step fixed position dial allowing field adjustable lumen and wattage dimming control for added project and design versatility to meet installation specific requirements. The specified Performance Code provides the maximum lumen output. Only compatible with VersaTEK's standard 0-10V drivers. Not compatible with DALI driver option.

General Control Options

ANSI C136.41 7-wire controls ready photocontrol receptacle 'PCR7CR' option available for use with LEOLink nodes or by others. Receptacle has a tool-less rotatable base with a positive lock to not allow over-rotation and possible damage to the receptacle. Optional DALI D4i and Part Night Dimming driver configurations are also available for added controllability and design flexibility. DALI compatible 'TLR4U' and 'TLR4L' 4-PIN twist lock receptacle options available (wireless DALI nodes or DALI sensors are by others).

LEOLink Intelligent Lighting System

ANSI C136.41 7-wire smart wireless controllers allow real-time monitoring and asset management of luminaires with 'NB01P05/10' wireless control nodes installed. RenAI cloud-based application receives system data while applying specific AI models for fault isolation and the resolution of voltage health, outages, knockdowns, energy usage, LED faults and more. Allows for full remote management of the luminaire, including the ability to store and execute customer specific schedules and performance parameters. System communicates via standard 4G/5G IoT networks with a cellular data plan and RenAI subscription.

Electrical

Rated life of electrical components is 100,000 hours. Standard 0-10V dimmable drivers use an isolated power supply with 6kV integral surge standard. Power supply features a minimum power factor of 0.90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Optional DALI D4i certified LED drivers also available, which complies with IEC 62386 and ANSI C137.4 and DiiA. Optional 3-position terminal block accommodates 6 to 16AWG wire. Standard surge protection (10kV/5kA Surge, Fail-to-On) complies with IEEE/ANSI C62.41 and ANSI C136.2-2015. Optional 'SP2' and 'LSSP2' provides (20kV/10kA) extreme level surge protection.

Finish

Housing receives a fade and abrasion resistant textured polyester powder coat finish with 3.0 mil nominal thickness. Finish tested to withstand 5000 hours in salt spray exposure per ASTM B117 and Coastal Finish per ASTM G85. 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 and are rated IP66. Luminaires are qualified to operate at ambient temperatures of -40°C to 50°C. (-40°F to 122°F)

Government Procurement Compliance

BAA- Buy America(n) Act: All LEOTEK luminaires qualify as a "Domestic End Product" per the Buy American Act as governed by FAR and DFARS.

BABA- Build America Buy America: All LEOTEK luminaires ordered with the 'BABA' option code are compliant per BABA requirements for BABA as outlined per the Federal Highway Administration (FHWA).

Quality Control

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

Warranty

10-year limited warranty is standard on luminaire and components. 5-year limited warranty on luminaires and components with a motion sensor. LEOLink Controllers can be specified with 5-year and 10-year limited warranties. See LEOTEK.com for warranty details, terms and conditions.

Standards

Luminaire complies with:

ANSI: C136.2, C136.3, 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

36A Performance Data* (70CRI*, 25° C ambient... *for 80CRI option use a 0.91 multiplier)

Normal tolerance +/- 10% due to factors that include distribution type, LED bin variance and ambient temperatures.

Perf. Code	System Wattage (W)	Optic	27K7 (2700K CCT, 70CRI)					30K7 (3000K CCT, 70CRI)					40K7 (4000K CCT, 70CRI)					50K7 (5000K CCT, 70CRI)					LLD @ 25°C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	50K Hours	75K Hours	100K Hours
P1	30	NR	4,936	165.0	1	0	1	5,282	176.0	1	0	1	5,528	184.0	2	0	1	5,528	184.0	2	0	1	0.979	0.972	0.965
		MR	4,860	162.0	1	0	1	5,201	173.0	1	0	1	5,443	181.0	2	0	2	5,443	181.0	2	0	2			
		WR	4,827	161.0	1	0	1	5,165	172.0	2	0	2	5,406	180.0	2	0	2	5,406	180.0	2	0	2			
		T2R	4,827	161.0	1	0	1	5,165	172.0	2	0	2	5,406	180.0	2	0	2	5,406	180.0	2	0	2			
		T2F	4,731	158.0	1	0	1	5,062	169.0	1	0	1	5,298	177.0	1	0	1	5,298	177.0	1	0	1			
		T3R	4,778	159.0	1	0	1	5,113	170.0	1	0	1	5,352	178.0	1	0	1	5,352	178.0	1	0	1			
		T3F	4,880	163.0	1	0	1	5,223	174.0	1	0	1	5,466	182.0	1	0	1	5,466	182.0	1	0	1			
		T4R	4,663	155.0	1	0	1	4,989	166.0	1	0	1	5,222	174.0	1	0	1	5,222	174.0	1	0	1			
		T4F	4,577	153.0	1	0	1	4,897	163.0	1	0	2	5,126	171.0	1	0	2	5,126	171.0	1	0	2			
		T5	4,843	161.0	3	0	1	5,182	173.0	3	0	1	5,424	181.0	3	0	1	5,424	181.0	3	0	1			
AFR	4,851	162.0	1	0	1	5,191	173.0	1	0	1	5,433	181.0	1	0	1	5,433	181.0	1	0	1					
P2	39	NR	6,375	163.0	2	0	1	6,822	175.0	2	0	1	7,140	183.0	2	0	1	7,140	183.0	2	0	1	0.979	0.972	0.965
		MR	6,278	161.0	2	0	2	6,718	172.0	2	0	2	7,031	180.0	2	0	2	7,031	180.0	2	0	2			
		WR	6,234	160.0	2	0	2	6,671	171.0	2	0	2	6,982	179.0	2	0	2	6,982	179.0	2	0	2			
		T2R	6,234	160.0	2	0	2	6,671	171.0	2	0	2	6,982	179.0	2	0	2	6,982	179.0	2	0	2			
		T2F	6,110	157.0	2	0	2	6,538	168.0	2	0	2	6,843	175.0	2	0	2	6,843	175.0	2	0	2			
		T3R	6,172	158.0	1	0	1	6,604	169.0	1	0	2	6,912	177.0	2	0	2	6,912	177.0	2	0	2			
		T3F	6,303	162.0	2	0	2	6,745	173.0	2	0	2	7,060	181.0	2	0	2	7,060	181.0	2	0	2			
		T4R	6,022	154.0	1	0	2	6,444	165.0	1	0	2	6,744	173.0	1	0	2	6,744	173.0	1	0	2			
		T4F	5,911	152.0	1	0	2	6,325	162.0	1	0	2	6,620	170.0	1	0	2	6,620	170.0	1	0	2			
		T5	6,255	160.0	3	0	2	6,693	172.0	3	0	2	7,005	180.0	3	0	2	7,005	180.0	3	0	2			
AFR	6,266	161.0	1	0	1	6,705	172.0	2	0	2	7,017	180.0	2	0	2	7,017	180.0	2	0	2					
P3	49	NR	7,768	159.0	2	0	1	8,312	170.0	2	0	1	8,700	178.0	2	0	2	8,700	178.0	2	0	2	0.942	0.919	0.896
		MR	7,649	156.0	2	0	2	8,185	167.0	2	0	2	8,566	175.0	2	0	2	8,566	175.0	2	0	2			
		WR	7,596	155.0	2	0	2	8,128	166.0	2	0	2	8,507	174.0	2	0	2	8,507	174.0	2	0	2			
		T2R	7,596	155.0	2	0	2	8,128	166.0	2	0	2	8,507	174.0	2	0	2	8,507	174.0	2	0	2			
		T2F	7,445	152.0	2	0	2	7,967	163.0	2	0	2	8,338	170.0	2	0	2	8,338	170.0	2	0	2			
		T3R	7,520	153.0	2	0	2	8,047	164.0	2	0	2	8,422	172.0	2	0	2	8,422	172.0	2	0	2			
		T3F	7,681	157.0	2	0	2	8,219	168.0	2	0	2	8,602	176.0	2	0	2	8,602	176.0	2	0	2			
		T4R	7,337	150.0	1	0	2	7,852	160.0	1	0	2	8,218	168.0	2	0	2	8,218	168.0	2	0	2			
		T4F	7,202	147.0	2	0	2	7,707	157.0	2	0	2	8,066	165.0	2	0	2	8,066	165.0	2	0	2			
		T5	7,621	156.0	3	0	2	8,155	166.0	3	0	2	8,535	174.0	3	0	2	8,535	174.0	3	0	2			
AFR	7,634	156.0	2	0	2	8,170	167.0	2	0	2	8,550	174.0	2	0	2	8,550	174.0	2	0	2					
P4	59	NR	9,115	154.0	2	0	2	9,754	165.0	2	0	2	10,208	173.0	2	0	2	10,208	173.0	2	0	2	0.942	0.919	0.896
		MR	8,976	152.0	2	0	2	9,605	163.0	2	0	2	10,052	170.0	2	0	2	10,052	170.0	2	0	2			
		WR	8,913	151.0	2	0	2	9,538	162.0	2	0	2	9,983	169.0	2	0	2	9,983	169.0	2	0	2			
		T2R	8,913	151.0	2	0	2	9,538	162.0	2	0	2	9,983	169.0	2	0	2	9,983	169.0	2	0	2			
		T2F	8,736	148.0	2	0	2	9,348	158.0	2	0	2	9,784	166.0	2	0	2	9,784	166.0	2	0	2			
		T3R	8,824	150.0	2	0	2	9,443	160.0	2	0	2	9,883	168.0	2	0	2	9,883	168.0	2	0	2			
		T3F	9,013	153.0	2	0	2	9,645	163.0	2	0	2	10,094	171.0	2	0	2	10,094	171.0	2	0	2			
		T4R	8,610	146.0	2	0	2	9,214	156.0	2	0	2	9,643	163.0	2	0	2	9,643	163.0	2	0	2			
		T4F	8,451	143.0	2	0	2	9,044	153.0	2	0	2	9,465	160.0	2	0	2	9,465	160.0	2	0	2			
		T5	8,943	152.0	4	0	2	9,570	162.0	4	0	2	10,016	170.0	4	0	2	10,016	170.0	4	0	2			
AFR	8,959	152.0	2	0	2	9,587	162.0	2	0	2	10,033	170.0	2	0	2	10,033	170.0	2	0	2					
P5	68	NR	10,417	153.0	2	0	2	11,147	164.0	3	0	2	11,666	172.0	3	0	2	11,666	172.0	3	0	2	0.942	0.919	0.896
		MR	10,257	151.0	2	0	2	10,977	161.0	3	0	3	11,488	169.0	3	0	3	11,488	169.0	3	0	3			
		WR	10,186	150.0	3	0	3	10,900	160.0	3	0	3	11,408	168.0	3	0	3	11,408	168.0	3	0	3			
		T2R	10,186	150.0	3	0	3	10,900	160.0	3	0	3	11,408	168.0	3	0	3	11,408	168.0	3	0	3			
		T2F	9,984	147.0	2	0	2	10,684	157.0	3	0	3	11,181	164.0	3	0	3	11,181	164.0	3	0	3			
		T3R	10,084	148.0	2	0	2	10,791	159.0	2	0	2	11,294	166.0	2	0	2	11,294	166.0	2	0	2			
		T3F	10,300	151.0	2	0	2	11,022	162.0	2	0	2	11,535	170.0	2	0	2	11,535	170.0	2	0	2			
		T4R	9,840	145.0	2	0	2	10,530	155.0	2	0	2	11,020	162.0	2	0	2	11,020	162.0	2	0	2			
		T4F	9,659	142.0	2	0	2	10,336	152.0	2	0	2	10,817	159.0	2	0	3	10,817	159.0	2	0	3			
		T5	10,220	150.0	4	0	2	10,937	161.0	4	0	2	11,446	168.0	4	0	2	11,446	168.0	4	0	2			
AFR	10,238	151.0	2	0	2	10,956	161.0	2	0	2	11,466	169.0	2	0	2	11,466	169.0	2	0	2					
P6	77	NR	11,672	152.0	3	0	2	12,490	162.0	3	0	2	13,072	170.0	3	0	2	13,072	170.0	3	0	2	0.942	0.919	0.896
		MR	11,494	149.0	3	0	3	12,299	160.0	3	0	3	12,872	167.0	3	0	3	12,872	167.0	3	0	3			
		WR	11,414	148.0	3	0	3	12,214	159.0	3	0	3	12,783	166.0	3	0	3	12,783	166.0	3	0	3			
		T2R	11,414	148.0	3	0	3	12,214	159.0	3	0	3	12,783	166.0	3	0	3	12,783	166.0	3	0	3			
		T2F	11,187	145.0	3	0	3	11,971	155.0	3	0	3	12,529	163.0	3	0	3	12,529	163.0	3	0	3			
		T3R	11,300	147.0	2	0	2	12,092	157.0	2	0	2	12,655	164.0	2	0	2	12,655	164.0	2	0	2			
		T3F	11,541	150.0	2	0	2	12,350	160.0	3	0	3	12,925	168.0	3	0	3	12,925	168.0	3	0	3			
		T4R	11,026	143.0	2	0	2	11,799	153.0	2	0	2	12,348	160.0	2	0	2	12,348	160.0	2	0	2			
		T4F	10,822	141.0	2	0	3	11,581	150.0	2	0	3	12,121	157.0	2	0	3	12,121	157.0	2	0	3			
T5	11,452	149.0	4	0	2	12,255	159.0	4	0	2	12,825	167.0	4	0	2	12,825	167.0	4	0	2					
AFR	11,472	149.0	2	0	2	12,276	159.0	2	0	2	12,848	167.0	3	0	3	12,848	167.0	3	0	3					
P7	86	NR	12,883	150.0	3	0	2	13,786	160.0	3	0	2	14,428	168.0	3	0	2	14,428	168.0	3	0	2	0.942	0.919	0.896
		MR	12,686	148.0	3	0	3	13,575	158.0	3	0	3	14,207	165.0	3	0	3	14,207	165.0	3	0	3			
		WR	12,598	146.0	3	0	3	13,481	157.0	3	0	3	14,109	164.0	3	0	3	14,109	164.0	3	0	3			
		T2R	12,598	146.0	3	0	3	13,481	157.0	3	0	3	14,109	164.0	3	0	3	14,109	164.0	3					

36A Performance Data* (70CRI*, 25° C ambient... *for 80CRI option use a 0.91 multiplier)

Normal tolerance +/- 10% due to factors that include distribution type, LED bin variance and ambient temperatures.

Perf. Code	System Wattage (W)	Optic	27K7 (2700K CCT, 70CRI)					30K7 (3000K CCT, 70CRI)					40K7 (4000K CCT, 70CRI)					50K7 (5000K CCT, 70CRI)					LLD @ 25°C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	50K Hours	75K Hours	100K Hours
P8	97	NR	14,046	145.0	3	0	2	15,031	155.0	3	0	2	15,731	162.0	3	0	2	15,731	162.0	3	0	2	0.934	0.911	0.888
		MR	13,832	143.0	3	0	3	14,801	153.0	3	0	3	15,491	160.0	3	0	3	15,491	160.0	3	0	3			
		WR	13,736	142.0	3	0	3	14,699	152.0	3	0	3	15,383	159.0	3	0	3	15,383	159.0	3	0	3			
		T2R	13,736	142.0	3	0	3	14,699	152.0	3	0	3	15,383	159.0	3	0	3	15,383	159.0	3	0	3			
		T2F	13,462	139.0	3	0	3	14,406	149.0	3	0	3	15,077	155.0	3	0	3	15,077	155.0	3	0	3			
		T3R	13,598	140.0	3	0	3	14,551	150.0	3	0	3	15,229	157.0	3	0	3	15,229	157.0	3	0	3			
		T3F	13,889	143.0	3	0	3	14,862	153.0	3	0	3	15,554	160.0	3	0	3	15,554	160.0	3	0	3			
		T4R	13,268	137.0	2	0	2	14,199	146.0	2	0	2	14,860	153.0	2	0	2	14,860	153.0	2	0	2			
		T4F	13,024	134.0	2	0	3	13,937	144.0	2	0	3	14,586	150.0	2	0	3	14,586	150.0	2	0	3			
		T5	13,781	142.0	4	0	2	14,747	152.0	4	0	2	15,434	159.0	4	0	2	15,434	159.0	4	0	2			
		AFR	13,805	142.0	3	0	3	14,773	152.0	3	0	3	15,461	159.0	3	0	3	15,461	159.0	3	0	3			
P9	106	NR	15,165	143.0	3	0	2	16,229	153.0	3	0	2	16,984	160.0	3	0	2	16,984	160.0	3	0	2	0.934	0.911	0.888
		MR	14,933	141.0	3	0	3	15,980	151.0	3	0	3	16,725	158.0	3	0	3	16,725	158.0	3	0	3			
		WR	14,830	140.0	3	0	3	15,869	150.0	3	0	3	16,609	157.0	3	0	3	16,609	157.0	3	0	3			
		T2R	14,830	140.0	3	0	3	15,869	150.0	3	0	3	16,609	157.0	3	0	3	16,609	157.0	3	0	3			
		T2F	14,535	137.0	3	0	3	15,554	147.0	3	0	3	16,278	154.0	3	0	3	16,278	154.0	3	0	3			
		T3R	14,681	139.0	3	0	3	15,711	148.0	3	0	3	16,442	155.0	3	0	3	16,442	155.0	3	0	3			
		T3F	14,995	141.0	3	0	3	16,046	151.0	3	0	3	16,794	158.0	3	0	3	16,794	158.0	3	0	3			
		T4R	14,325	135.0	2	0	2	15,330	145.0	2	0	2	16,043	151.0	2	0	3	16,043	151.0	2	0	3			
		T4F	14,061	133.0	2	0	3	15,047	142.0	3	0	3	15,748	149.0	3	0	3	15,748	149.0	3	0	3			
		T5	14,879	140.0	4	0	2	15,922	150.0	4	0	2	16,664	157.0	4	0	3	16,664	157.0	4	0	3			
		AFR	14,905	141.0	3	0	3	15,950	150.0	3	0	3	16,693	157.0	3	0	3	16,693	157.0	3	0	3			

72A Performance Data* (70CRI*, 25° C ambient... *for 80CRI option use a 0.91 multiplier)

Normal tolerance +/- 10% due to factors that include distribution type, LED bin variance and ambient temperatures.

Perf. Code	System Wattage (W)	Optic	27K7 (2700K CCT, 70CRI)					30K7 (3000K CCT, 70CRI)					40K7 (4000K CCT, 70CRI)					50K7 (5000K CCT, 70CRI)					LLD @ 25°C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	50K Hours	75K Hours	100K Hours
P1	74	NR	12,350	167.0	3	0	2	13,215	179.0	3	0	2	13,831	187.0	3	0	2	13,831	187.0	3	0	2	0.979	0.972	0.965
		MR	12,259	166.0	2	0	2	13,118	177.0	3	0	3	13,729	186.0	3	0	3	13,729	186.0	3	0	3			
		WR	12,440	168.0	3	0	3	13,312	180.0	3	0	3	13,932	188.0	3	0	3	13,932	188.0	3	0	3			
		T2R	12,440	168.0	3	0	3	13,312	180.0	3	0	3	13,932	188.0	3	0	3	13,932	188.0	3	0	3			
		T2F	11,973	162.0	3	0	3	12,812	173.0	3	0	3	13,409	181.0	3	0	3	13,409	181.0	3	0	3			
		T3R	12,123	164.0	2	0	2	12,973	175.0	2	0	2	13,577	183.0	2	0	2	13,577	183.0	2	0	2			
		T3F	12,318	166.0	2	0	2	13,181	178.0	3	0	3	13,795	186.0	3	0	3	13,795	186.0	3	0	3			
		T4R	12,025	162.0	2	0	2	12,867	174.0	2	0	2	13,467	182.0	2	0	2	13,467	182.0	2	0	2			
		T4F	11,614	157.0	2	0	3	12,428	168.0	2	0	3	13,007	176.0	2	0	3	13,007	176.0	2	0	3			
		T5	12,037	163.0	4	0	2	12,881	174.0	4	0	2	13,481	182.0	4	0	2	13,481	182.0	4	0	2			
P2	83	AFR	12,188	165.0	2	0	2	13,043	176.0	2	0	2	13,650	184.0	3	0	3	13,650	184.0	3	0	3	0.979	0.972	0.965
		NR	13,718	165.0	3	0	2	14,680	177.0	3	0	2	15,364	185.0	3	0	2	15,364	185.0	3	0	2			
		MR	13,617	164.0	3	0	3	14,572	176.0	3	0	3	15,251	184.0	3	0	3	15,251	184.0	3	0	3			
		WR	13,818	166.0	3	0	3	14,787	178.0	3	0	3	15,476	186.0	3	0	3	15,476	186.0	3	0	3			
		T2R	13,818	166.0	3	0	3	14,787	178.0	3	0	3	15,476	186.0	3	0	3	15,476	186.0	3	0	3			
		T2F	13,300	160.0	3	0	3	14,232	171.0	3	0	3	14,895	179.0	3	0	3	14,895	179.0	3	0	3			
		T3R	13,467	162.0	2	0	2	14,411	174.0	3	0	3	15,082	182.0	3	0	3	15,082	182.0	3	0	3			
		T3F	13,683	165.0	3	0	3	14,642	176.0	3	0	3	15,324	185.0	3	0	3	15,324	185.0	3	0	3			
		T4R	13,357	161.0	2	0	2	14,294	172.0	2	0	2	14,959	180.0	2	0	2	14,959	180.0	2	0	2			
		T4F	12,901	155.0	2	0	3	13,806	166.0	2	0	3	14,449	174.0	2	0	3	14,449	174.0	2	0	3			
P3	92	T5	13,371	161.0	4	0	2	14,308	172.0	4	0	2	14,975	180.0	4	0	2	14,975	180.0	4	0	2	0.942	0.919	0.896
		AFR	13,539	163.0	2	0	2	14,488	175.0	3	0	3	15,163	183.0	3	0	3	15,163	183.0	3	0	3			
		NR	15,066	164.0	3	0	2	16,123	175.0	3	0	2	16,873	183.0	3	0	2	16,873	183.0	3	0	2			
		MR	14,955	163.0	3	0	3	16,004	174.0	3	0	3	16,749	182.0	3	0	3	16,749	182.0	3	0	3			
		WR	15,176	165.0	3	0	3	16,240	177.0	3	0	3	16,996	185.0	3	0	3	16,996	185.0	3	0	3			
		T2R	15,176	165.0	3	0	3	16,240	177.0	3	0	3	16,996	185.0	3	0	3	16,996	185.0	3	0	3			
		T2F	14,607	159.0	3	0	3	15,631	170.0	3	0	3	16,359	178.0	3	0	3	16,359	178.0	3	0	3			
		T3R	14,790	161.0	3	0	3	15,827	172.0	3	0	3	16,564	180.0	3	0	3	16,564	180.0	3	0	3			
		T3F	15,027	163.0	3	0	3	16,081	175.0	3	0	3	16,830	183.0	3	0	3	16,830	183.0	3	0	3			
		T4R	14,670	159.0	2	0	2	15,698	171.0	2	0	3	16,429	179.0	2	0	3	16,429	179.0	2	0	3			
P4	101	T4F	14,169	154.0	2	0	3	15,162	165.0	2	0	3	15,868	172.0	3	0	3	15,868	172.0	3	0	3	0.942	0.919	0.896
		T5	14,685	160.0	4	0	2	15,714	171.0	4	0	2	16,446	179.0	4	0	2	16,446	179.0	4	0	2			
		AFR	14,869	162.0	3	0	3	15,912	173.0	3	0	3	16,653	181.0	3	0	3	16,653	181.0	3	0	3			
		NR	16,394	162.0	3	0	2	17,543	174.0	3	0	2	18,360	182.0	3	0	2	18,360	182.0	3	0	2			
		MR	16,273	161.0	3	0	3	17,414	172.0	3	0	3	18,225	180.0	3	0	3	18,225	180.0	3	0	3			
		WR	16,513	163.0	3	0	3	17,671	175.0	3	0	3	18,494	183.0	3	0	3	18,494	183.0	3	0	3			
		T2R	16,513	163.0	3	0	3	17,671	175.0	3	0	3	18,494	183.0	3	0	3	18,494	183.0	3	0	3			
		T2F	15,894	157.0	3	0	3	17,008	168.0	3	0	3	17,800	176.0	3	0	3	17,800	176.0	3	0	3			
		T3R	16,093	159.0	3	0	3	17,221	171.0	3	0	3	18,024	178.0	3	0	3	18,024	178.0	3	0	3			
		T3F	16,351	162.0	3	0	3	17,497	173.0	3	0	3	18,312	181.0	3	0	3	18,312	181.0	3	0	3			
P5	109	T4R	15,962	158.0	2	0	3	17,081	169.0	2	0	3	17,877	177.0	2	0	3	17,877	177.0	2	0	3	0.942	0.919	0.896
		T4F	15,417	153.0	3	0	3	16,498	163.0	3	0	3	17,266	171.0	3	0	3	17,266	171.0	3	0	3			
		T5	15,979	158.0	4	0	2	17,099	169.0	4	0	3	17,895	177.0	5	0	3	17,895	177.0	5	0	3			
		AFR	16,179	160.0	3	0	3	17,313	171.0	3	0	3	18,120	179.0	3	0	3	18,120	179.0	3	0	3			
		NR	17,700	162.0	3	0	2	18,941	174.0	3	0	2	19,824	182.0	3	0	2	19,824	182.0	3	0	2			
		MR	17,570	161.0	3	0	3	18,802	172.0	3	0	3	19,678	181.0	3	0	3	19,678	181.0	3	0	3			
		WR	17,829	164.0	3	0	3	19,079	175.0	3	0	3	19,968	183.0	3	0	3	19,968	183.0	3	0	3			
		T2R	17,829	164.0	3	0	3	19,079	175.0	3	0	3	19,968	183.0	3	0	3	19,968	183.0	3	0	3			
		T2F	17,160	157.0	3	0	3	18,363	168.0	3	0	3	19,219	176.0	3	0	3	19,219	176.0	3	0	3			
		T3R	17,376	159.0	3	0	3	18,594	171.0	3	0	3	19,460	179.0	3	0	3	19,460	179.0	3	0	3			
P6	117	T3F	17,654	162.0	3	0	3	18,892	173.0	3	0	3	19,772	181.0	3	0	3	19,772	181.0	3	0	3	0.942	0.919	0.896
		T4R	17,234	158.0	2	0	3	18,443	169.0	2	0	3	19,301	177.0	3	0	3	19,301	177.0	3	0	3			
		T4F	16,646	153.0	3	0	3	17,813	163.0	3	0	3	18,643	171.0	3	0	3	18,643	171.0	3	0	3			
		T5	17,252	158.0	4	0	3	18,462	169.0	5	0	3	19,322	177.0	5	0	3	19,322	177.0	5	0	3			
		AFR	17,469	160.0	3	0	3	18,693	171.0	3	0	3	19,564	179.0	3	0	3	19,564	179.0	3	0	3			
		NR	18,987	162.0	3	0	2	20,318	174.0	3	0	2	21,264	182.0	3	0	2	21,264	182.0	3	0	2			
		MR	18,847	161.0	3	0	3	20,168	172.0	3	0	3	21,107	180.0	3	0	3	21,107	180.0	3	0	3			
		WR	19,125	163.0	3	0	3	20,466	175.0	3	0	3	21,419	183.0	3	0	3	21,419	183.0	3	0	3			
		T2R	19,125	163.0	3	0	3	20,466	175.0	3	0	3	21,419	183.0	3	0	3	21,419	183.0	3	0	3			
		T2F	18,407	157.0	3	0	3	19,698	168.0	3	0	3	20,615	176.0	3	0	3	20,615	176.0	3	0	3			
P7	126	T3R	18,639	159.0	3	0	3	19,945	170.0	3	0	3	20,874	178.0	3	0	3	20,874	178.0	3	0	3	0.942	0.919	0.896
		T3F	18,937	162.0	3	0	3	20,265	173.0	3	0	3	21,209	181.0	3	0	3	21,209	181.0	3	0	3			
		T4R	18,487	158.0	2	0	3	19,783	169.0	3	0	3	20,704	177.0	3	0	3	20,704	177.0	3	0	3			
		T4F	17,856	153.0	3	0	3	19,107	163.0	3	0	3	19,997	171.0	3	0	3	19,997	171.0	3	0	3			
		T5	18,506	158.0	5	0	3	19,803	169.0	5	0	3	20,726	177.0	5	0	3	20,726	177.0	5	0	3			
		AFR	18,738	160.0	3	0	3	20,052	171.0	3	0	3	20,986	179.0	3	0	3	20,986	179.0	3	0	3			
		NR	20,252	161.0	3	0	2	21,672	172.0	3	0	2	22,681	180.0	3	0	2	22,681	180.0	3	0	2			
		MR	20,103	160.0	3	0	3	21,512	171.0	3	0	3	22,514	179.0	3	0	3	22,514	179.0	3	0	3			
		WR	20,400	162.0	3	0	3	21,830	173.0	3	0	3	22,847	181.0											

72A Performance Data* (70CRI*, 25° C ambient... *for 80CRI option use a 0.91 multiplier)

Normal tolerance +/- 10% due to factors that include distribution type, LED bin variance and ambient temperatures.

Perf. Code	System Wattage (W)	Optic	27K7 (2700K CCT, 70CRI)					30K7 (3000K CCT, 70CRI)					40K7 (4000K CCT, 70CRI)					50K7 (5000K CCT, 70CRI)					LLD @ 25°C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	50K Hours	75K Hours	100K Hours
P8	135	NR	21,497	159.0	3	0	2	23,004	170.0	3	0	3	24,075	178.0	3	0	3	24,075	178.0	3	0	3	0.934	0.911	0.888
		MR	21,339	158.0	3	0	3	22,835	169.0	3	0	3	23,898	177.0	3	0	3	23,898	177.0	3	0	3			
		WR	21,654	160.0	3	0	3	23,172	172.0	3	0	3	24,251	180.0	3	0	3	24,251	180.0	3	0	3			
		T2R	21,654	160.0	3	0	3	23,172	172.0	3	0	3	24,251	180.0	3	0	3	24,251	180.0	3	0	3			
		T2F	20,841	154.0	3	0	3	22,302	165.0	3	0	3	23,341	173.0	3	0	3	23,341	173.0	3	0	3			
		T3R	21,103	156.0	3	0	3	22,582	167.0	3	0	3	23,634	175.0	3	0	3	23,634	175.0	3	0	3			
		T3F	21,441	159.0	3	0	3	22,944	170.0	3	0	3	24,013	178.0	3	0	3	24,013	178.0	3	0	3			
		T4R	20,931	155.0	3	0	3	22,398	166.0	3	0	3	23,442	174.0	3	0	4	23,442	174.0	3	0	4			
		T4F	20,216	150.0	3	0	3	21,634	160.0	3	0	4	22,641	168.0	3	0	4	22,641	168.0	3	0	4			
		T5	20,953	155.0	5	0	3	22,422	166.0	5	0	3	23,466	174.0	5	0	3	23,466	174.0	5	0	3			
P9	144	AFR	21,216	157.0	3	0	3	22,703	168.0	3	0	3	23,760	176.0	3	0	3	23,760	176.0	3	0	3	0.934	0.911	0.888
		NR	22,721	158.0	3	0	2	24,314	169.0	3	0	3	25,447	177.0	3	0	3	25,447	177.0	3	0	3			
		MR	22,554	157.0	3	0	3	24,135	168.0	3	0	3	25,259	175.0	3	0	3	25,259	175.0	3	0	3			
		WR	22,887	159.0	3	0	3	24,491	170.0	3	0	3	25,632	178.0	3	0	3	25,632	178.0	3	0	3			
		T2R	22,887	159.0	3	0	3	24,491	170.0	3	0	3	25,632	178.0	3	0	3	25,632	178.0	3	0	3			
		T2F	22,028	153.0	3	0	3	23,572	164.0	3	0	3	24,670	171.0	3	0	3	24,670	171.0	3	0	3			
		T3R	22,305	155.0	3	0	3	23,869	166.0	3	0	3	24,980	173.0	3	0	4	24,980	173.0	3	0	4			
		T3F	22,662	157.0	3	0	3	24,251	168.0	3	0	3	25,380	176.0	3	0	3	25,380	176.0	3	0	3			
		T4R	22,123	154.0	3	0	3	23,674	164.0	3	0	4	24,776	172.0	3	0	4	24,776	172.0	3	0	4			
		T4F	21,368	148.0	3	0	4	22,866	159.0	3	0	4	23,931	166.0	3	0	4	23,931	166.0	3	0	4			
P10	155	T5	22,146	154.0	5	0	3	23,699	165.0	5	0	3	24,802	172.0	5	0	3	24,802	172.0	5	0	3	0.934	0.911	0.888
		AFR	22,424	156.0	3	0	3	23,996	167.0	3	0	3	25,114	174.0	3	0	3	25,114	174.0	3	0	3			
		NR	23,925	154.0	3	0	3	25,602	165.0	3	0	3	26,795	173.0	3	0	3	26,795	173.0	3	0	3			
		MR	23,749	153.0	3	0	3	25,414	164.0	3	0	3	26,597	172.0	3	0	3	26,597	172.0	3	0	3			
		WR	24,099	155.0	3	0	3	25,789	166.0	3	0	3	26,990	174.0	3	0	3	26,990	174.0	3	0	3			
		T2R	24,099	155.0	3	0	3	25,789	166.0	3	0	3	26,990	174.0	3	0	3	26,990	174.0	3	0	3			
		T2F	23,195	150.0	3	0	3	24,821	160.0	3	0	3	25,977	168.0	3	0	3	25,977	168.0	3	0	3			
		T3R	23,486	152.0	3	0	3	25,133	162.0	3	0	4	26,304	170.0	3	0	4	26,304	170.0	3	0	4			
		T3F	23,863	154.0	3	0	3	25,536	165.0	3	0	3	26,725	172.0	3	0	3	26,725	172.0	3	0	3			
		T4R	23,295	150.0	3	0	4	24,928	161.0	3	0	4	26,089	168.0	3	0	4	26,089	168.0	3	0	4			
P11	165	T4F	22,500	145.0	3	0	4	24,077	155.0	3	0	4	25,199	163.0	3	0	4	25,199	163.0	3	0	4	0.934	0.911	0.888
		T5	23,319	150.0	5	0	3	24,954	161.0	5	0	3	26,116	168.0	5	0	3	26,116	168.0	5	0	3			
		AFR	23,612	152.0	3	0	3	25,267	163.0	3	0	3	26,444	171.0	3	0	3	26,444	171.0	3	0	3			
		NR	25,108	152.0	3	0	3	26,868	163.0	3	0	3	28,120	170.0	3	0	3	28,120	170.0	3	0	3			
		MR	24,923	151.0	3	0	3	26,671	162.0	3	0	3	27,913	169.0	3	0	3	27,913	169.0	3	0	3			
		WR	25,291	153.0	3	0	3	27,064	164.0	3	0	3	28,325	172.0	4	0	4	28,325	172.0	4	0	4			
		T2R	25,291	153.0	3	0	3	27,064	164.0	3	0	3	28,325	172.0	4	0	4	28,325	172.0	4	0	4			
		T2F	24,342	148.0	3	0	3	26,049	158.0	3	0	3	27,262	165.0	3	0	3	27,262	165.0	3	0	3			
		T3R	24,648	149.0	3	0	3	26,376	160.0	3	0	4	27,604	167.0	3	0	4	27,604	167.0	3	0	4			
		T3F	25,043	152.0	3	0	3	26,798	162.0	3	0	3	28,047	170.0	3	0	3	28,047	170.0	3	0	3			
		T4R	24,447	148.0	3	0	4	26,161	159.0	3	0	4	27,379	166.0	3	0	4	27,379	166.0	3	0	4			
		T4F	23,612	143.0	3	0	4	25,268	153.0	3	0	4	26,445	160.0	3	0	4	26,445	160.0	3	0	4			
		T5	24,472	148.0	5	0	3	26,188	159.0	5	0	3	27,408	166.0	5	0	4	27,408	166.0	5	0	4			
		AFR	24,779	150.0	3	0	3	26,517	161.0	3	0	3	27,752	168.0	3	0	3	27,752	168.0	3	0	3			

Optional Field Adjustable Performance Selector 'PS' ('PS' is only compatible with standard 0-10V drivers, not compatible w/ optional DALI drivers)
The optional Performance Selector is an integral dial that allows for field adjustable lumen/wattage dimming control for added design versatility. Normal tolerance +/- 8%.

36A*

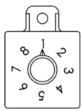
PS Position	Lumen Output %	P1	P2	P3	P4	P5	P6	P7	P8	P9
Wattage (W)										
8	100%	30	39	49	59	68	77	86	97	106
7	90%	27	35	43	52	61	69	77	85	94
6	80%	24	31	38	47	54	61	68	76	83
5	70%	21	27	33	42	48	54	60	66	72
4	60%	18	23	29	36	41	47	52	57	63
3	50%	15	19	24	31	35	39	44	48	52
2	40%	12	16	19	25	29	32	36	39	42
1	30%	9	12	14	19	22	25	28	30	32

*For 80CRI option use an additional 0.91 lumen multiplier.

72A *

PS Position	Lumen Output %	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11
Wattage (W)												
8	100%	74	83	92	101	109	117	126	135	144	155	165
7	90%	66	74	82	89	100	107	115	123	131	140	147
6	80%	59	66	73	79	88	95	102	110	116	123	130
5	70%	52	58	64	70	78	84	90	96	102	107	114
4	60%	45	50	55	60	68	73	78	83	88	93	98
3	50%	38	43	46	50	57	61	65	70	74	78	83
2	40%	31	35	38	41	47	50	53	57	60	63	66
1	30%	24	27	29	31	36	39	41	44	46	48	51

*For 80CRI option use an additional 0.91 lumen multiplier.



Optional Field Adjustable
Performance Selector 'PS' Dial

VTSSA-36A IES TM-21 LED Lumen Maintenance (*values *italicized* are per LM-80 data that is extrapolated beyond the TM-21 6X standard)
Reported lumen maintenance life projections are based on 6X the duration of the LED's IES LM-80 tested performance data in accordance per IES TM-21 guidelines.

IES TM-21 LED Lumen Maintenance						
5050LED Optics Performance Code P1 to P2	0 Hrs	25,000 Hrs	50,000 Hrs	60,000 Hrs	*75,000 Hrs	*100,000 Hrs
VTS 36A @ 25C ambient	100.00%	98.60%	97.89%	97.61%	<i>97.19%</i>	<i>96.49%</i>
VTS 36A @ 50C ambient	100.00%	96.13%	97.23%	96.87%	<i>96.33%</i>	<i>95.45%</i>

IES TM-21 LED Lumen Maintenance						
5050LED Optics Performance Code P3 to P7	0 Hrs	25,000 Hrs	50,000 Hrs	60,000 Hrs	*75,000 Hrs	*100,000 Hrs
VTS 36A @ 25C ambient	100.00%	96.65%	94.23%	93.27%	<i>91.86%</i>	<i>89.56%</i>
VTS 36A @ 50C ambient	100.00%	95.75%	93.2%	92.19%	<i>90.71%</i>	<i>88.29%</i>

IES TM-21 LED Lumen Maintenance						
5050LED Optics Performance Code P8 to P9	0 Hrs	25,000 Hrs	50,000 Hrs	60,000 Hrs	*75,000 Hrs	*100,000 Hrs
VTS 36A @ 25C ambient	100.00%	95.85%	93.43%	92.47%	<i>91.06%</i>	<i>88.76%</i>
VTS 36A @ 50C ambient	100.00%	95.26%	92.26%	91.09%	<i>89.36%</i>	<i>86.54%</i>

VTSSA-36A IES TM-21 LED Lumen Maintenance (*values *italicized* are per LM-80 data that is extrapolated beyond the TM-21 6X standard)
Reported lumen maintenance life projections are based on 6X the duration of the LED's IES LM-80 tested performance data in accordance per IES TM-21 guidelines.

IES TM-21 LED Lumen Maintenance						
5050LED Optics Performance Code P1 to P2	0 Hrs	25,000 Hrs	50,000 Hrs	60,000 Hrs	*75,000 Hrs	*100,000 Hrs
VTS 72A @ 25C ambient	100.00%	98.60%	97.89%	97.61%	<i>97.19%</i>	<i>96.49%</i>
VTS 72A @ 50C ambient	100.00%	96.31%	93.65%	92.61%	<i>91.07%</i>	<i>88.56%</i>

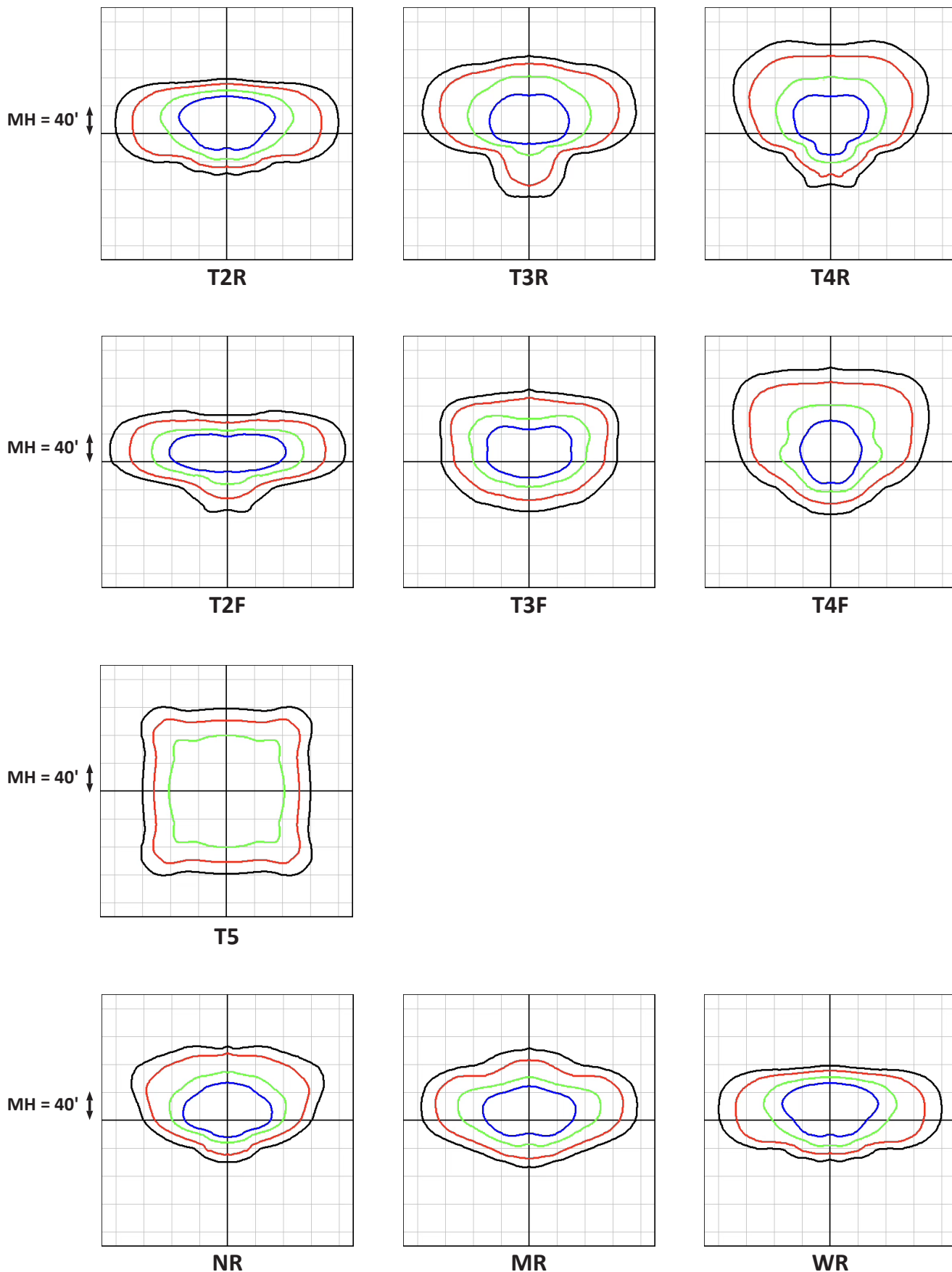
IES TM-21 LED Lumen Maintenance						
5050LED Optics Performance Code P3 to P11	0 Hrs	25,000 Hrs	50,000 Hrs	60,000 Hrs	*75,000 Hrs	*100,000 Hrs
VTS 72A @ 25C ambient	100.00%	96.65%	94.23%	93.27%	<i>91.86%</i>	<i>89.56%</i>
VTS 72A @ 50C ambient	100.00%	94.93%	91.60%	90.31%	<i>88.40%</i>	<i>85.30%</i>

Optical Isofootcandle Plots ('72A P11' Performance Code, 4000K/5000K, 70CRI, 20' Mounting Height MH, Grid Scale = MH or 40' as shown)

Complete non-shielded & shielded photometric IES files are available for download at www.LEOTEK.com or can be found in AGI32's Photometric Instabase.

LEGEND

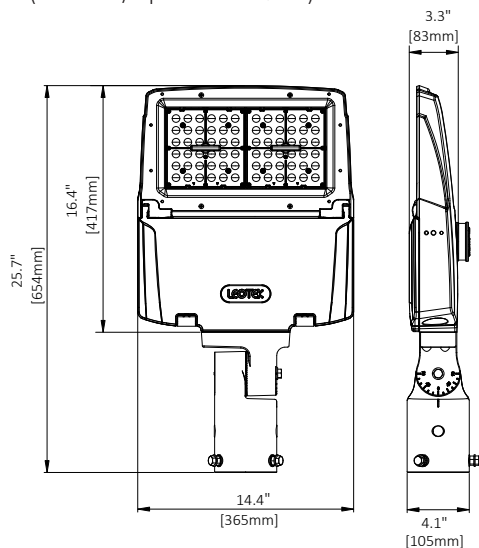
- 0.1 Fc
- 0.2 Fc
- 0.5 Fc
- 1.0 Fc



Mounting Option Details & Dimensional Information

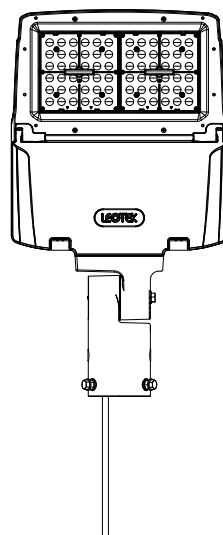
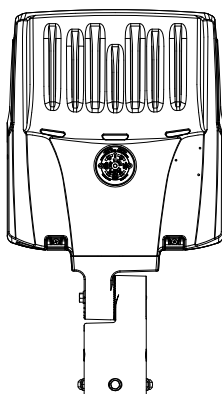
'SF' Slipfitter Mount #1*

(available wire leads in UL splice compartment)
(shown w/ optional 'PCR7CR')



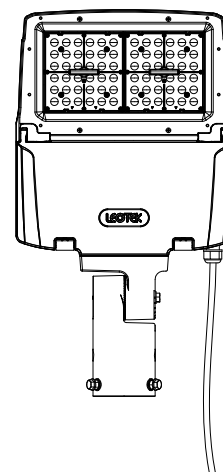
'SFC' Slipfitter #2*

(w/ 3-wire S/O Cord Center Fitter Exit)



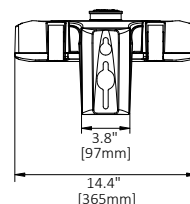
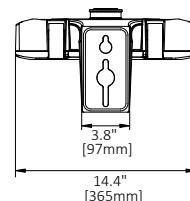
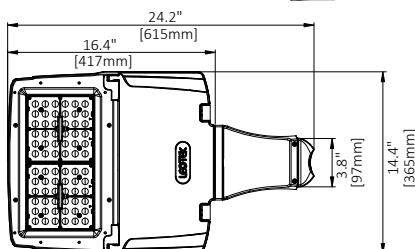
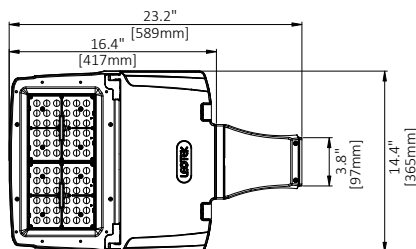
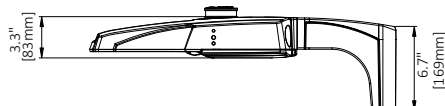
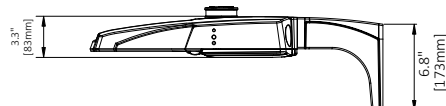
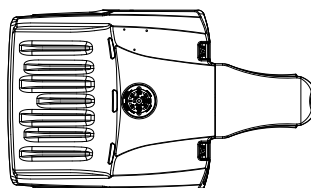
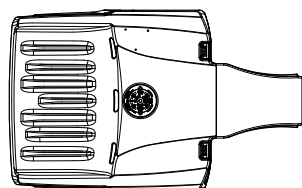
'SFH' Slipfitter #3*

(w/ 3-wire S/O Cord Bottom Housing Exit)



'SPM' Square & 'RPM' Round Pole Arm Mount*

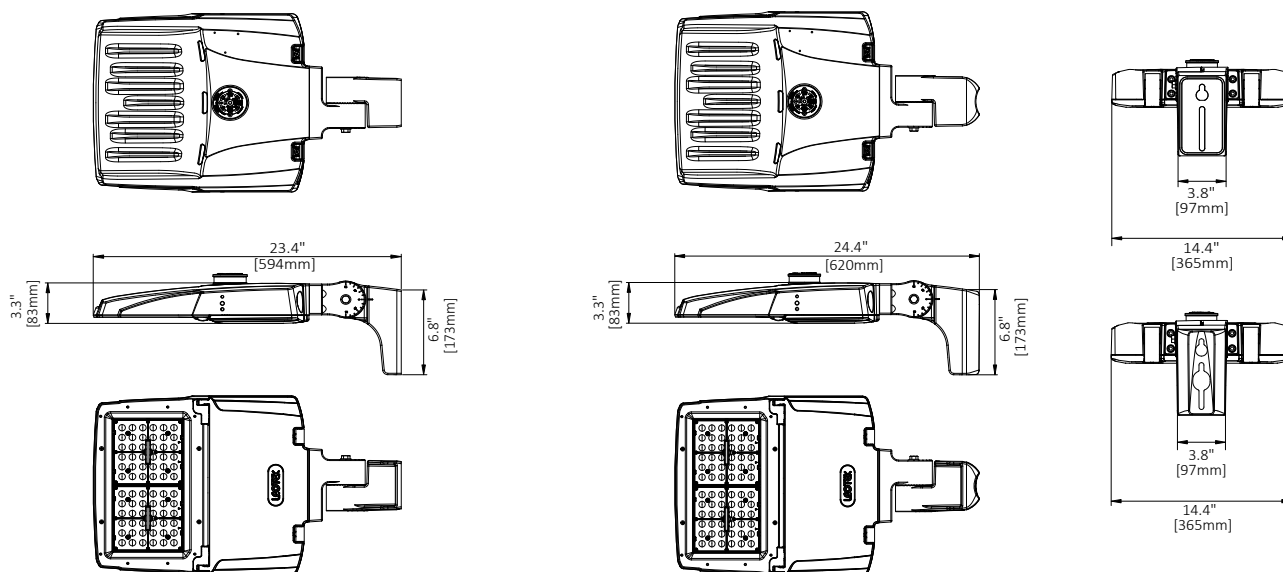
(quick mount arm can retrofit up to 5.25" max. bolt spacing w/ no drilling required)



Mounting Option Details & Dimensional Information *(continued)*

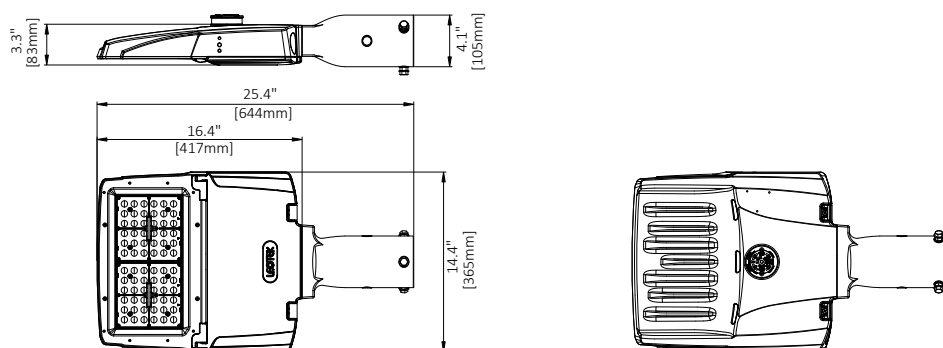
'ASPM' Square & 'ARPM' Adjustable Round Pole Arm Mount*

(arm can retrofit up to 5.25" max. bolt spacing w/ no drilling required)



'MAF' Horizontal Mast Arm Fitter Mount*

(3/8" stainless steel thru-bolt & nut is included)



Key Additional Miscellaneous Product Features & Design Details

Integral Tool-Free Access Design

Tool-free electrical access & removable hinged door w/ fixed open door prop design for ease of installation or maintenance
(compatible w/ most lineman safety gloves)



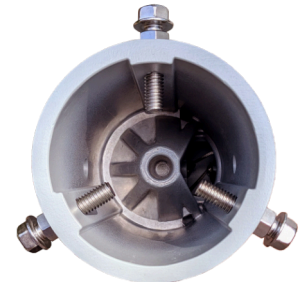
Slipfitter w/ UL Splice Box

'SF' Slipfitter w/ integral UL recognized splice compartment
(w/ available wire lead access & WAGOs for ease of installation)



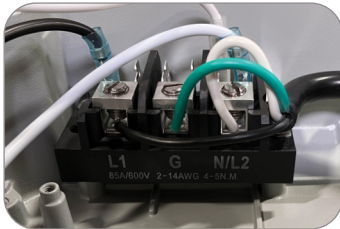
Self-Centering Design

Slipfitter & Mast Arm fitter options are designed with a self-centering & leveling design feature
(compatible w/ 1-5/8", 2-3/8" & 3" O.D. tenons)



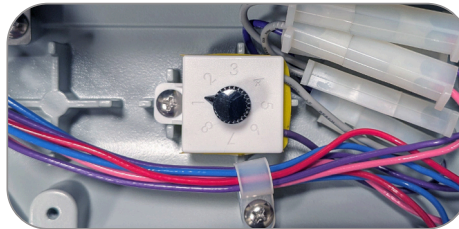
3-Position Terminal Block 'TB' Option

For ease of maintenance & increased safety, improved wire management & robust product life cycle operation
(includes line, neutral & ground, accommodates 6 to 16AWG wire)



Performance Selector 'PS' Option

Allows for quick & easy field adjustment of wattage, lumen output and reduced SKU complexity
(fixed position dial ensures correct output setting)



Integral VersaKick

VersaKick 'kickstand' props open the door during installation or maintenance
(allows for 'frustration free' ease of access)



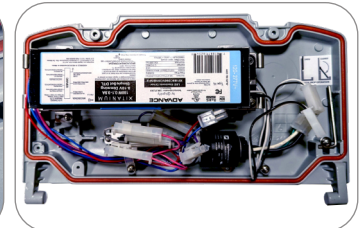
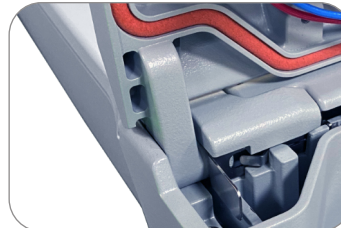
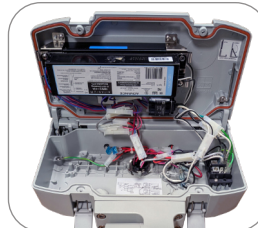
Pass-Thru Convective Cooling

(3) integral cooling slots allows ambient air to flow freely thru the luminaire for enhanced thermal management
(maximizes lifetime of electrical components & lumen maintenance)



Tool-Free Removable Power Door Option 'PWRD'

All serviceable electrical components are mounted to a tool-free removable Power Door that can be removed in less than 15 seconds to safely service on the ground or replace in seconds
(undo MOLEX connectors, push two spring clips inward to unlock door, slide the door forward & lift to remove)



'4SS-VTS'

4-Sided Shield



'TBS-VTS'

Top or Bottom Shield



'LRS-VTS'

Left or Right Side Shield



'BDS-VTS'

Barn Door Shield



'WG-VTS'

Wire Guard



'VS-VTS'

Poly Vandal Shield



LEOLink ILS™ Intelligent Lighting System for Tomorrow's Smart & Sustainable Cities

Smart...Scalable...Effortless

LEOLink ILS is the next evolution in street lighting, integrating AI and IoT to transform a city's traditional outdoor lighting infrastructure into a smart, adaptive network. It empowers municipalities and utilities with real-time control, predictive maintenance, and rapid scalability, all with unmatched simplicity.

Integrating LEOTEK's AI-driven centralized management platform (LEOLink RenAI) with intelligent streetlight controllers, LEOLink ILS provides 24x7 visibility into the status and performance of streetlights enabling efficient energy use, real-time fault detection, and predictive maintenance across city-wide lighting networks. Easy "plug-and-play" deployment and scalability support users in achieving operational excellence, public safety, and long-term sustainability. With LEOLink ILS, cities are creating the backbone of a future-ready smart city.

Key Functions

Centralized, Remote Management

Gain complete control of your city's smart lighting infrastructure from a single, intuitive platform.

Instant Response to Anomalies

Automatically identify and respond to abnormal lighting behavior in real-time.

AI-Powered Predictive Maintenance

Detect and address faults before they occur, minimizing downtime and maintenance costs.

Actionable Insights Through Data Visualization

Monitor asset performance and energy trends with clear, interactive dashboards and reports.

Energy Efficiency & Cost Savings

Optimize energy usage with intelligent scheduling and dimming, reducing operational expenses.

LEOLink Controllers Key Features & Benefits

The smartest fit for 7-PIN NEMA fixtures. Engineered to deliver seamless performance, trusted security, and plug-and-play simplicity, all in one powerful, next-generation controller.



Self-Monitoring & Fault Detection

Controllers continuously monitors the luminaire's operational status, identifying power outages, failures, and abnormal energy patterns for fast diagnostics and improved maintenance efficiency.



Ultra-High Connectivity

Dual-mode cellular communication using the world's most reliable and secure carriers ensures a 99.5% connection success rate, delivering reliable continuous data transmission even in challenging environments.



Built-In Surge Protection

Advanced surge protection against lightning and voltage spikes safeguards critical streetlight infrastructure.



AI-Driven Adaptive Dimming

Participates with LEOLink RenAI to enable intelligent dimming strategies, including human-centric lighting adjustments based on real-time traffic, weather, and pedestrian activity.



Predictive Maintenance & Analytics

Advanced failure analysis and predictive diagnostics move cities from reactive to preventative maintenance strategies that reduce downtime and operational costs.



*LEOLink 'NB01P05/10' Smart Controller

LEOLink RenAI Central Management System Key Features & Benefits

RenAI is an AI-powered, cloud-based Central Management System (CMS) that turns streetlighting into a dynamic, adaptive, and self-optimizing network. Using a native AI foundation, it analyzes both real-time and historical data—surpassing traditional CMS capabilities—to address the complex needs of modern roadway infrastructure. The result: improved energy efficiency, reduced operational costs, and enhanced public safety for utilities and municipalities.



LiSA (LEOTEK intelligent Service Advisor)

LiSA, our AI-powered assistant, is available 24/7 to streamline operations, quickly answering questions, generating charts and tables, and assisting with troubleshooting to lighten your team's workload.



Asset Management

Collect and track roadway infrastructure asset information such as streetlight fixtures, poles and controllers. to drive operational efficiencies across from field maintenance to life cycle management.



Remote Control

Remotely switch lights ON/OFF and adjust brightness via an intuitive user interface.



Fault Detection & Notification

Monitor streetlight health and status in real time to detect and receive instant fault alerts.



Energy Consumption Management

Track usage, identify trends, and forecast energy needs for optimal efficiency.



Data Analysis & Reporting

Access historical insights, visualize data, and generate reports for informed decision-making.



Scheduled Dimming

Automatically adjusts brightness levels based on ambient light and pre-set schedules.



LEOLink Intelligent Lighting System (ILS) Ordering Information*

(*add to end of luminaire catalog number to ship controller with the luminaire) Sample Catalog No. Luminaire w/ Controller: VTSOR-72A-MV-30K7-NR-GY-P11-SF-PCR7CR-TB-WL1-PWRD-NB01P10-R10-D10 (controllers will ship included with the luminaire)
Sample Catalog No. for Controller Only: NB01P05-R05-D05 (controllers will ship separately from the luminaire)

LEOLink Smart Controllers		RenAI CMS Subscription		Network Data Plan	
NB01P05 ¹	LEOLink 7-PIN Controller, 5YR Warranty (120-277V)	R01	RenAI, One Year SaaS Subscription	D01	Data Plan, One Year Subscription
NB01P10 ¹	LEOLink 7-PIN Controller, 10YR Warranty (120-277V)	R05	RenAI, Five Year SaaS Subscription	D05	Data Plan, Five Year Subscription
		R10	RenAI, Ten Year SaaS Subscription	D10	Data Plan, Ten Year Subscription
		R00 ²	RenAI, No SaaS Subscription	D00 ²	Data Plan, No Subscription

1. For each controller, a RenAI CMS Subscription 'RXX' and Network Data Plan 'DXX' is required. Please refer to the LEOLink ILS specification sheets and ordering guide for complete ordering and specification details.
2. 'R00' and 'D00' options require prior approval from LEOTEK. Please contact factory for details.

Motion Sensor (Optional) Specifications*

Integral motion sensor options are available for horizontal site & area and fixed wall mounting options only.

'MSL3', 'MSL7' motion sensors require secondary controls for ON/OFF capability (*ex. time clock or 0-10V by others*). Contact factory for Motion Sensor availability w/ 'PCR7CR' control ready receptacle for use with wireless 7-PIN control node (*by others*).

'MSL3P', 'MSL7P' motion sensors, luminaire includes a PCR7 photocontrol receptacle for use with a twist lock photocontrol for ON/OFF capability.
(*for use with our 'LLPC' or photocontrol by others, PINs 6 & 7 are not wired for controls, not compatible w/ wireless nodes*).

Description

Digital passive infrared luminaire integrated outdoor occupancy sensor provides high/low/off control based on motion detection. Initial setup and subsequent sensor adjustments are made using a handheld configuration tool. PCR option is required for On/Off control using light detection. Available with both MV or HV input voltage options.

Operation

Standard factory setting will dim the luminaire to 50% until motion is sensed and then it will power to 100%. When motion is not detected for five minutes, the luminaire will dim back to 50%. Ramp up and fade down times are adjustable, but initially set to NONE. The percent dimming and time durations may be field adjusted as required using FSIR-100 configuration tool. FSIR-100 user guide available at: www.wattstopper.com.

Optical System

Multi-cell, multi-tier Fresnel lens with a 360 degree view detects unobstructed motion within one mounting height, up to 20 ft. maximum (MSL3) or 40 ft. maximum (MSL7). Consult factory for higher mounting height requirements.

Finish

Sensor exterior ring and lens are white polycarbonate, UV and impact resistant.

Listings/Ratings

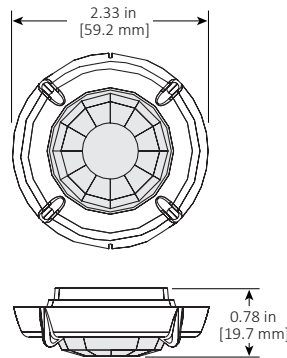
Sensor is TUV, UL and cUL listed, IP66 rated and CE compliant.

Warranty

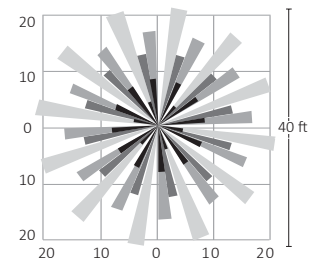
5-year limited warranty on luminaires and components with a motion sensor.

Motion Sensor (Optional) Data

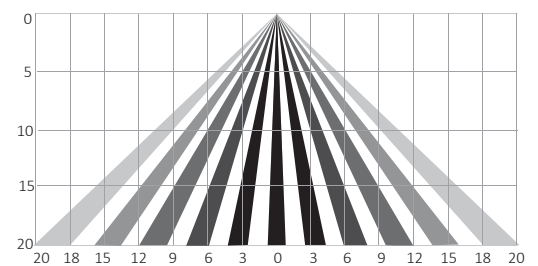
MSL3 Lens Dimensions



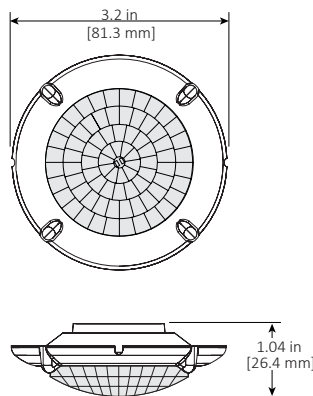
MSL3 Lens Coverage Top View



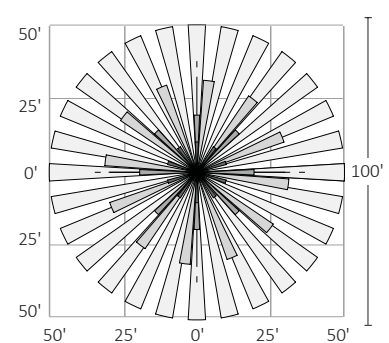
MSL3 Lens Coverage Side View



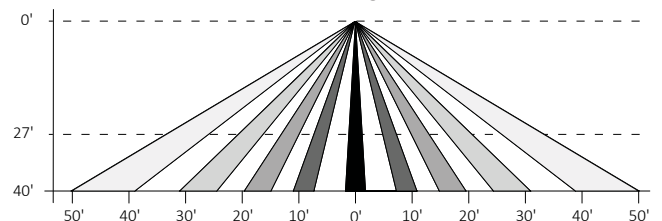
MSL7 Lens Dimensions



L7 Lens Coverage Top View



L7 Lens Coverage Side View



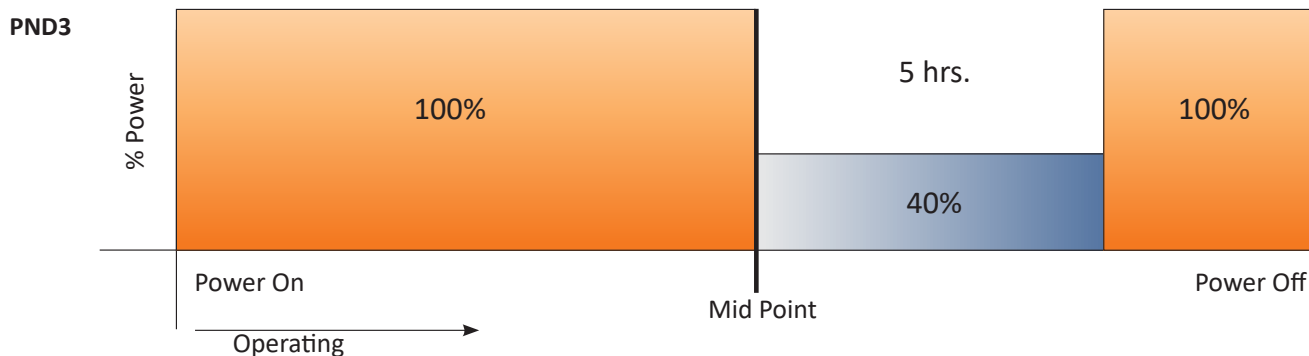
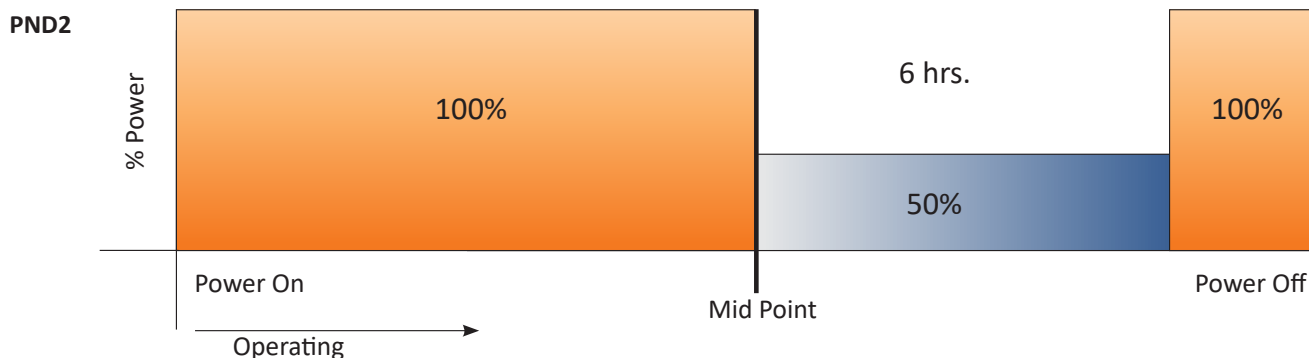
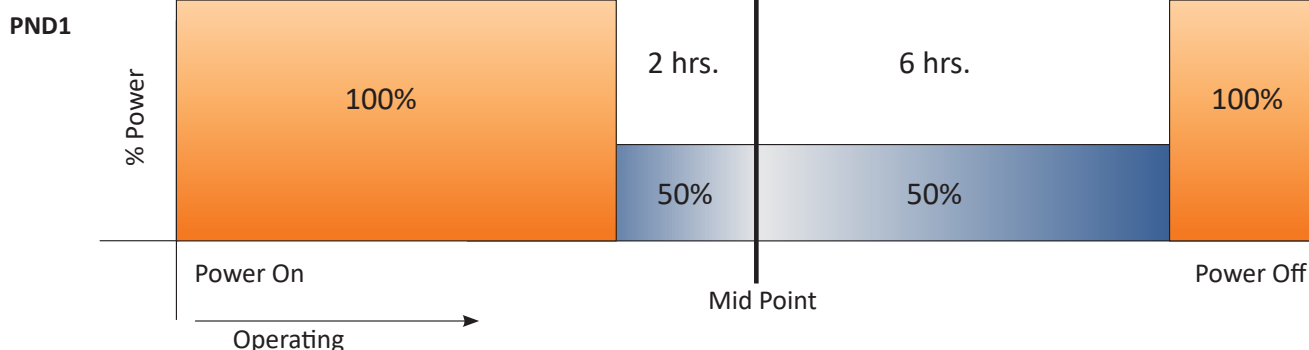
Part-Night Dimming Specifications

Description

Part-Night Dimming (PND) option enables significant energy savings by automatically dimming the luminaire during early morning hours when infrequent use is expected. Factory programmed dimming profiles automatically take into account seasonal changes based on geographical location by continuously monitoring the nighttime midpoint. PND does not provide power on/off control which is provided by external controls (example: time clock or a photocontrol using 'PCR7CR' option). Dimming profile of PND option is not field adjustable.

Operation

Based on the PND profile that is selected, the luminaire dims to the corresponding % power for the corresponding length of time (based on the nighttime mid-point) as shown below. Mid-point is continuously recalculated in the luminaire by monitoring the average length of time between when the light turns on (power on) and turns off (power off) over the previous two days. In effect, this functionality will take two days to initialize after installation before any dimming will occur. Power interruptions are ignored and do not affect the determination of mid-point. A motion sensor ('MSL3', 'MSL7' or 'MSL3P', 'MSL7P') can be used with PND to temporarily override the dimming profile when motion is detected. Three factory programmed PND profiles are available for selection:



VersaTEK Small LED OFF-Roadway - Luminaire EPA Values

(*Includes luminaire and mounting options shown. Secondary tenons, brackets or other accessories are not included in the EPA data.)

Luminaire Quantity & Orientation		Effective Projected Area (EPA ft²)								
		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Option	Tilt									
SF Slip Fitter	0°	0.82	1.22	1.64	2.04	1.78	2.04	0.79	1.19	1.58
	10°	0.82	1.35	1.64	2.17	2.02	2.17	1.05	1.58	2.10
	20°	0.82	1.62	1.64	2.44	2.52	2.44	1.60	2.40	3.20
	30°	1.09	1.92	1.64	2.74	3.09	2.74	2.19	3.28	4.38
SFC Slip Fitter Center	40°	1.36	2.19	1.64	3.01	3.62	3.01	2.73	4.09	5.45
	45°	1.48	2.31	1.64	3.13	3.86	3.13	2.97	4.45	5.94
	50°	1.59	2.42	1.64	3.24	4.08	3.24	3.19	4.78	6.38
	60°	1.78	2.60	1.78	3.43	4.46	3.43	3.56	5.34	7.12
SFH Slip Fitter Housing	70°	1.92	2.74	1.92	3.56	4.74	3.56	3.83	5.75	7.66
	80°	2.01	2.83	2.01	3.65	4.93	3.65	4.02	6.02	8.03
	90°	2.04	2.86	2.04	3.69	5.00	3.69	4.08	6.12	8.17
	0°	0.72	1.25	1.44	1.97	1.94	1.97	1.05	1.58	2.11
ASPM & ARPM Adjustable Square & Round Pole Arm Mount	10°	0.72	1.38	1.44	2.10	2.18	2.10	1.33	1.99	2.66
	20°	0.94	1.66	1.44	2.38	2.68	2.38	1.88	2.81	3.75
	30°	1.23	1.95	1.44	2.67	3.25	2.67	2.47	3.70	4.93
	40°	1.50	2.22	1.50	2.94	3.78	2.94	3.00	4.51	6.01
	45°	1.62	2.34	1.62	3.06	4.02	3.06	3.25	4.87	6.49
	50°	1.73	2.45	1.73	3.17	4.24	3.17	3.47	5.20	6.93
	60°	1.92	2.64	1.92	3.36	4.62	3.36	3.84	5.76	7.68
	70°	2.05	2.77	2.05	3.49	4.90	3.49	4.11	6.16	8.22
	80°	2.15	2.86	2.15	3.58	5.09	3.58	4.29	6.44	8.58
	90°	2.18	2.90	2.18	3.62	5.17	3.62	4.35	6.53	8.71

Luminaire Quantity & Orientation		Effective Projected Area (EPA ft²)					
		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90
Mounting Option	Tilt						
SPM & RPM Sq. & Rd. Pole Arm	0°	0.69	1.22	1.38	1.90	1.90	1.90
MAF Mast Arm Fitter	0°	0.81	1.20	1.62	2.01	1.79	2.01

Fixed & Adjustable Square & Round Pole Arm Mount Drilling Dimensions for New Construction

(for additional details, please consult online installation instructions)

