REQUEST FOR PROPOSALS TO

CITY OF RIALTO

SOLAR LIGHT POSTS INSTALLATION – CACTUS TRAIL

Submitted by St. Francis Electric, LLC.
2100 Iowa Ave, Riverside, CA 92507

"EXPERIENCE, QUALITY & RELIABILITY..."

Mike Orona
City of Rialto
335 W. Rialto Avenue, Rialto, CA 92376

Due by: June 12, 2026

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Cover Letter

June 12, 2026

Mike Orona, Deputy Director of Maintenance & Facilities
City of Rialto
335 W. Rialto Avenue
Rialto, CA 92376

RE: Solar Light Posts Installation – Cactus Trail

Dear Mr. Orona,

St. Francis Electric, LLC., (herein after referred to as SFE) is pleased to submit this proposal for the Solar Light Posts Installation on Cactus Trail from Rialto Avenue to Baseline Road. Our team understands the importance of this project in improving visibility, enhancing public safety, and supporting long-term infrastructure reliability.

Our proposed scope of work includes furnishing and installing solar-powered light posts at designated locations along the Cactus Trail, while ensuring all placement and construction activities comply with SBCFCD requirements for channel maintenance access. We recognize that any work proposed within or adjacent to SBCFCD property or maintained facilities must preserve the integrity of the flood control system and maintain required access for operations and maintenance.

In addition, we will coordinate closely with the City regarding final placement, construction scheduling, and compliance with all applicable standards and requirements. Our approach emphasizes proactive communication, careful planning, and adherence to approved specifications to support a smooth and efficient project delivery.

St. Francis Electric, LLC., is the submitting organization, a firm in business for over 80 years and is qualified and experienced in providing these services throughout California.

All communication regarding this proposal should be directed to the following contact:

- Jill Petrie, SoCal Area Manager
- Mailing Address: 2100 Iowa Ave ,Riverside, CA 92507
- Phone: 951-203-4586
- Email: jpetrie@sfe-inc.com

We appreciate the opportunity to present this proposal and look forward to the possibility of contributing to this important improvement project.

Respectfully Submitted,

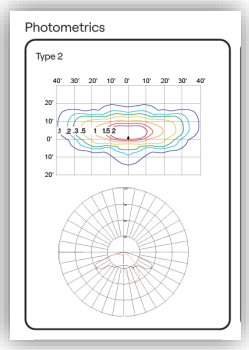
Jill Petrie

Jill Petrie
SoCal Area Manager
2100 Iowa Avenue, Riverside, CA 92507
951-203-4586
jpetrie@sfe-inc.com | https://www.stfranciselectric.com

1. Light Post Specifications

The proposed **IPL-PTM** fixture features an integrated solar engine mounted directly to the top of a structural steel pole, keeping vulnerable components out of reach from vandals. Finished in an architectural **Black (BK) powder coat**, the post is highly resistant to coastal weathering, UV degradation, and graffiti. To address the specific public right-of-way challenges along the Cactus Trail, the fixture includes upgraded **Security Fasteners (SEC)**. These tamper-resistant mechanical locks require specialized proprietary tools for removal, drastically reducing the risk of component theft or vandalism.

2. Light Output (Lumens):



The proposed lighting system utilizes a high-efficiency LED fixture delivering a precise light output of **1,550 lumens** per post. To optimize this output for the Cactus Trail, the fixtures are engineered with a **Type II (T2) asymmetric optical distribution**, which shapes the light into a long, narrow linear footprint specifically designed for Class I bicycle and pedestrian paths. This specialized distribution ensures that the illumination is directed precisely onto the paved bike path and walkway, maximizing surface visibility while preventing wasteful light spill into the adjacent roadway or the San Bernardino County Flood Control District (SBCFCD) right-of-way. Operating on a **continuous dusk-to-dawn profile (00)**, the system automatically engages at sunset to provide uniform, reliable illumination throughout all dark hours. Furthermore, the selection of an **2700K Extra Warm White (XW)** color temperature provides high-contrast visibility that preserves natural night vision for trail users, ensures strict dark-sky compliance, and avoids disruption to local wildlife corridors near the Rialto Channel.

Proposed Solar Light Post Technical Specifications:

Component / Feature	Specification Details	RFP Compliance Value
Model / Series	**IPL Series** (Integrated Pole-Top Luminaire)	Commercial-grade architectural trail lighting
Mounting Style	**PTM**: Post Top Mount	Clean aesthetic; places solar engine above pedestrian reach
Finish & Color	**BK**: Architectural Black	Powder-coated, weather-resistant, vandalism-deterring
Optical Distribution	**T2**: Type II Light Distribution	Ideal for long, narrow spaces like paths and walkways
Color Temperature	**XW**: 2700K Extra Warm White	Environmentally friendly; dark-sky and wildlife compliant
Operating Profile	**00**: Continuous Operation (Dusk-to-Dawn)	Assures 100% night safety for extended evening trail hours
Vandalism Protection	**SEC**: Security Fasteners	Tamper-proof hardware prevents unauthorized access

3. Quantity of Suggested Posts:

By deploying exactly **99 solar light posts** spaced uniformly at **80-foot intervals** along the 1.5-mile Cactus Trail, this configuration delivers optimal, overlapping Type II trail illumination while satisfying all City of Rialto safety standards.

Final Technical Specifications Matrix

Component / Feature	Engineering Specification	RFP Compliance & Lifecycle Value
Total Quantity	**99 Posts**	Complete 1.5-mile path coverage
Pole Height	**14 Feet**	Ideal pedestrian-scale clearance
Light Output	**1,550 Lumens**	High-efficiency safety lighting
Optical Pattern	**Type II (T2)**	Linear path-optimized distribution
Battery Chemistry	**LiFePO4** (Lithium Iron Phosphate)	Extreme temperature resistance
Battery Lifespan	**10 Years**	Extended maintenance cycle
LED Lifespan	**100,000 Hours**	Decades of operating life
Operating Profile	**Dusk-to-Dawn (00)**	Uninterrupted nighttime trail safety
Vandalism Deterrence	**Security Fasteners (SEC)**	Tamper-proof hardware locking

4. Project Approach:

Phase 1: Pre-Construction & Engineering Coordination

This phase focuses on aligning stakeholders, securing permits, and finalizing technical placements before breaking ground.

- **Stakeholder Alignment**: Host a kickoff meeting with the City of Rialto (Lead Agency) and SBCFCD (If required) to establish communication protocols.
- **SBCFCD Right-of-Way Validation**: Conduct a field survey to map the exact boundaries of the Rialto Channel maintenance access zones.
- **Utility Clearance**: Submit a DigAlert (811) ticket to locate and mark all underground utilities prior to final design.
- **Mapping**: Finalize the exact locations of the light posts.
- **Permit Acquisition**: Secure (no-Fee) encroachment permits as required from the City of Rialto, County of San Bernardino and if necessary, from SBCFCD.

Phase 2: Procurement & Logistics Management

Ensuring high-quality materials are ordered and safely staged minimizes project delays.

- **Vendor Selection**: Order commercial-grade solar light posts featuring smart MPPT controllers and LiFePO4 batteries.

- **Quality Assurance**: Inspect all incoming solar panels, batteries, LED fixtures, and powder-coated steel poles for defects upon arrival.
- **Staging Logistics**: Materials to be stored at SFE warehouse & storage yard to hold materials, minimizing on-site footprints along Cactus Avenue.

Phase 3: Site Preparation & Civil Works

Civil works will be executed in rolling segments to keep the majority of the trail open to the public.

- **Segmented Work Zones**: Divide the 1.5-mile trail into 0.25-mile construction segments to localize disruptions.
- **Layout Marking**: Stake out exact pole locations according to the approved plans and SBCFCD setback rules.
- **Foundation Excavation**: Drill pier foundations using a mini excavator auger parked on the street side where possible.
- **Concrete Pouring**: Pour rebar-reinforced concrete foundations with embedded anchor bolts, ensuring proper curing time.

Phase 4: Assembly, Installation & Commissioning

This phase brings the solar infrastructure online and ensures system performance.

- **Mechanical Assembly**: Assemble the poles, solar panels, brackets, and LED luminaires on the ground within the closed trail segment.
- **Erection & Securing**: Erect the light posts onto the concrete foundations using a light crane or boom truck.
- **Electrical Integration**: Connect the pre-wired plug-and-play solar harnesses and program the smart controllers for autonomous night operation.
- **System Testing**: Perform daytime charging verification and nighttime illumination audits to confirm lumen coverage.

Phase 5: Project Closeout & Trail Restoration

The final phase returns the trail to pristine condition and hands operations over to the City.

- **Site Demobilization**: Remove all construction debris, tools, and temporary safety fencing from the trail.
- **Maintenance Handover**: Provide maintenance brief detailing. Panel cleaning schedules and battery lifecycle expectations.

Anticipated Challenges & Mitigation Strategies

- **SBCFCD Maintenance Access Blockages**
    - *Challenge*: Equipment blocking the Rialto Channel access roads during installation.
    - *Mitigation*: Mount all light posts on the far outer edge of the Class I trail clearance zone. Keep all construction vehicles parked strictly within the designated street-side lane closures rather than on the flood control dirt roads.
- **Pedestrian & Bicycle Disruption**
    - *Challenge*: Active trail users entering the construction zone, creating safety hazards.

- *Mitigation*: Implement a comprehensive Traffic Control Plan (TCP) using visual electronic message boards, robust barricades, and clear detour signs diverting users to the opposite sidewalk.

- **Dust & Environmental Control**
  - *Challenge*: Excavation blowing dirt onto the newly paved Class I trail or into the Rialto Channel.
  - *Mitigation*: Utilize continuous water-misting during augering and sweep the paved bike path at the end of every afternoon shift.
- **Solar Shade Interference**
  - *Challenge*: Nearby trees or structures blocking sunlight from hitting the solar panels.
  - *Mitigation*: Perform a solar path analysis during Phase 1. Adjust individual pole spacing slightly or utilize extended mounting arms to position panels into maximum direct sunlight.

5. Schedule:

To deliver a seamless installation and avoid any prolonged closures along the Cactus Trail, our team has structured a highly efficient, phased timeline that accounts for a standard **8-week lead time** for material procurement. By utilizing this lead time to finalize designs, secure required permits from the City of Rialto and the San Bernardino County Flood Control District (SBCFCD), and complete underground utility DigAlert, we guarantee that no physical trail disruptions will occur until all equipment is safely staged locally. Once materials arrive, the schedule transitions immediately into an intensive, 40-day active construction window: a **25-day civil phase** dedicated to drilling, reinforcing, and pouring the concrete foundations, followed by a **15-day mechanical phase** to assemble, erect, and program the solar poles and LED fixtures. The comprehensive timeline below details this strategic workflow from contract award to final system testing and project handover.

Project Schedule Overview

Phase	Task Description	Duration	Timeline Position	Milestone / Note
Phase 1	**Procurement & Pre-Con Engineering**	**8 Weeks**	Weeks 1 – 8	Materials arrive at local staging yard
Phase 2	**Civil Works & Foundation Construction**	**25 Days**	Weeks 9 – 13	**Critical Milestone: Foundations Complete**
Phase 3	**Assembly, Installation & Wiring**	**15 Days**	Weeks 14 – 16	**Critical Milestone: Lighting Fully Erected**
Phase 4	**Testing, Commissioning & Closeout**	**5 Days**	Week 17	Final inspection and project handover

6. Experience and References:

Experience

Our firm brings extensive experience delivering solar lighting solutions in environments that closely mirror the conditions and requirements of this project. We have successfully installed and maintained solar-powered lighting systems within public rights-of-way, including roadways, pedestrian corridors, and municipal infrastructure zones, where safety, reliability, and regulatory compliance are critical.

In addition, we have completed multiple projects within flood control channels, basins, and adjacent access roads, where unique environmental and structural considerations must be addressed. These projects required careful coordination with local agencies, adherence to hydraulic and environmental constraints, and the implementation of durable, self-sustaining solar lighting systems capable of operating in remote or non-energized locations.

Our experience includes site assessment, photometric planning, equipment specification, and installation of solar lighting assemblies designed to withstand variable weather conditions, limited grid access, and challenging terrain. We are also well-versed in permitting processes and stakeholder coordination, ensuring that all installations meet applicable municipal, county, and agency standards.

Through these efforts, we have consistently delivered solutions that enhance visibility, improve public safety, and reduce long-term operational costs. Our familiarity with right-of-way constraints and flood control environments positions us to execute this project efficiently while minimizing disruption and maintaining compliance with all governing requirements.

References

Project Name: Solano County Lighting Improvement Project 2025
Contract Amount: $275,813.60
Agency: County of Solano
Contact Name: Riley Martinson
Contact Phone: 707-784-3177
Project Description: SFE installed solar powered light fixtures on metal poles a various locations throughout Solano County. Work also included installation of concrete footings and object markers.

Project Name: 6th Street Lighting Improvement Project, CIP C2203
Contract Amount: $183,084.00
Agency: City of Hollister
Contact Name: Cristian Builes
Contact Phone: 831-636-4340
Project Description: SFE installed solar street lights including solar lights, poles, and foundations in the City of Hollister along 6th Street between West Street and Monterey Street.

Project Name: Stockrest Springs Road Roundabout Project, CIP C1612
Contract Amount: $230,000.00
Agency: McCuen Construction, Inc. (Town of Truckee)
Contact Name: Cody Dales
Contact Phone: 916-652-7824
Project Description: SFE was subcontracted to furnish and install street lighting including; trenching and backfill, pull boxes, conduit, conductors, and traffic control.

Project Name: Caltrans 04-2Q5204
Contract Amount: $7,178,000.00
Agency: Bay Cities Paving & Grading, Inc. (Caltrans Project in the County of Solano)
Contact Name: Chad Brown
Contact Phone: 925-687-6666
Project Description: SFE was subcontracted to furnish and install street lighting on City streets including; potholing, installing large foundations, modifying the existing signal and lighting systems, and modifying ped hybrid beacon systems.

7. Cost Proposal:

In order to provide the City of Rialto with maximum financial transparency and fiscal predictability, our itemized cost proposal has been structured into four distinct, comprehensive cost centers: Materials & Equipment procurement, Civil Works construction, Mechanical Installation labor, and a dedicated project contingency. The values outlined in the matrix below reflect all-inclusive, commercial-grade pricing, encompassing all manufacturing, shipping to our local staging yard, safety traffic control, heavy machinery utilization, and specialized labor required to deliver the 99 solar light posts along the 1.5-mile Cactus Trail corridor. All pricing is fully compliant with prevailing wage laws and standard public works practices within San Bernardino County, ensuring a fixed-price delivery with zero hidden administrative or overhead fees.

Project Cost Summary Matrix

Item #	Cost Category Description	Calculation Basis / Details	Total Category Cost ($)
1.0	**Labor Subtotal**	TS Electrician & Signal Maintenance Superintendent	**$183,940.00**
2.0	**Equipment Subtotal**	Bucket, Crane, Trucks, Arrow Board & Trailers	**$65,380.00**
3.0	**Subcontractor Base Cost**	SoCal Short Load (Concrete)	**$20,700.00**
4.0	**Subcontractor GM Markup**	General Manager Markup	**$3,652.94**
5.0	**Materials Subtotal**	FTL, United, Cages, Forms, Paint & Misc	**$327,621.00**
6.0	**Material Sales Tax**	8.75% State & Local Sales Tax	**$28,666.84**
7.0	**Additional Fees & Freight**	Disposal Fees & TMAC Delivery Fees	**$8,600.00**
8.0	**Material GM Markup**	General Manager Markup on Materials + Tax + Fees	**$91,221.96**
TOTAL	**GRAND TOTAL BID PRICE**	**All-Inclusive Fixed Cost for 99 Posts**	**$729,782.74**

Again, we appreciate the opportunity to present this proposal and look forward to the possibility of contributing to this important improvement project. Please contact me at (951) 203-4586 or jpetrie@sfe-inc.com with any questions. Detailed specifications (outlined in red) and Brochure from First Light Technologies attached following this page.

Respectfully Submitted,

Jill Petrie

Jill Petrie
SoCal Area Manager
2100 Iowa Avenue, Riverside, CA 92507
951-203-4586
jpetrie@sfe-inc.com | https://www.stfranciselectric.com

Discover the reliance, safety and peace of mind solar lighting can bring to your project. First Light Technologies combines ingenuity with design to deliver the industry's most advanced solar lights.

Reliability	Safety	Innovation
• Grid Independent Resistance • 50% Lower Upfront Costs	• Eliminates Copper Wire Theft • Brings Light to Where you Need It	• Installs in Minutes, Not Hours • Adapts to Stay On all Night

Short and Long-term Cost Reduction

No trenching, wiring or permitting means a typical 50% savings on upfront installation costs. Plus no copper wiring and a tamper-proof designs eliminates unpredictable repair and remediation costs.

Built to Last, Designed for Life

Our LiFePO4 battery combined with our signature Adaptive Intelligence ensures your installation stays on all night, every night, delivering worry-free resilience to your project.

Trusted to bring the light ***where it's needed the most***

Pulte HOMES · NASA · D·R·HORTON America's Builder · Parks Canada / Parcs Canada · U.S. ARMY

Our Products

Bollards

PLB
Pathway and Way-finding Bollard

450 Lumen

- Sidewalks
- Pathways
- Parks
- Hospitality

WLB
Omni- Directional Bollard

130Lumen

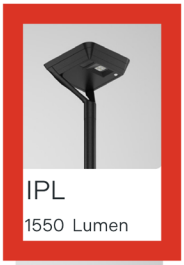
- Developments
- Marine
- Playgrounds
- Way-finding

Vega
Design Forward Bollard

540 Lumen

Pole Top/Side Mount

SCL
1550 Lumen



IPL
1550 Lumen

RSL - Pole and Side Mount
3350 Lumen

SCL2
3680 Lumen

- Playgrounds
- Parks
- Campuses
- Parking

- Local Roads
- Security
- Plazas
- Area Lighting

High-Output

BFL
Roadway Lighting System

7220 Lumen

BFL
Area Lighting System

7220 Lumen

- Local Roads
- Security
- Plazas
- Area Lighting

- Connector Roads
- Campuses
- Parking

FLT Solar Light Features

Color Temperature
Available in 2700K, 3000K, 4000K, Lumileds NightScape (>2% bluelight) and wild life friendly Amber temperature options.

Designed for Efficiency
Our MPPT based charge controller, lets us harvest every ray of sunshine to operate at nearly twice the efficiency of standard solar lights.

Ultra Durable Build
FLT products are built to be utility-grade, exceeding rigorous impact, wind, temperature and environmental testing standards.

The Last Light You'll Ever Need
With a 10+ year battery life and 100,000 hour LED, FLT makes sure you never have to worry about keeping the lights on.

Complimentary lighting layouts and photometry

Let us show you how easy outdoor lighting can be.

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FLT

Project:

Type: Quantity:

Classic Square Series — IPL

The contemporary square shape of the IPL luminaire makes it an attractive choice for a variety of locations including commercial pathways, bike trails, public spaces, and more. With FLT's exclusive Adaptive Intelligence, the IPL provides dependable illumination throughout the night, regardless of weather conditions or geographic location. Robust construction and unmatched performance make it an excellent choice for high-quality illumination and minimal visual clutter. With no need to trench or pull electrical wiring, IPL is an elegant, extraordinarily cost-effective solution.

Features & Benefits:

- No wiring, trenching, or electrical service required
- Integrated design eliminates visually distracting external solar panels
- Cost-effective design ships fully assembled and installs in minutes
- No ongoing maintenance
- Provides programmed illumination all night, every night
- Wireless control & communication with your light

Key Applications:

- Area, Pathway, Mailbox, Parking Lot

Technical Specifications

Solar Module	• Industry's most efficient solar panel technology • Integrated into the top of luminaire • Active cell technology optimizes power generation even when partially blocked
Battery	• High performance Lithium Iron Phosphate (LiFePO4) technology • Exceptional 10+ year life • High and low temperature tolerance • Integrated within luminaire housing
LED Light Engine	• Integrated optics maximize application efficiency and light distribution • CCT Options: 2700K, 3000K, 4000K • Wildlife friendly, narrow-band Amber LEDs (595nm) • High-efficiency type 2, 3, 4, and 5 full cutoff optics • Optional backlight shield
Optical Performance	• 100,000-hour LED L70 lifetime • Typical output of 1360 lumens with default profile • Dark Sky approved for 2700K, 3000K, and Amber • B0 – U0 – G0 BUG Rating (T4)
FLT's Exclusive Controller with Adaptive Intelligence	• Ensures all-night every-night performance by intelligently managing lighting based on environmental conditions and lighting requirements • Smart dusk/dawn detection synchronizes lights across installation using atronomical calculations • Automatically detects its timezone and sets its time for time-of-night profiles • High-efficiency, Maximum Power Point Tracking (MPPT) battery charger • High-efficiency integrated LED driver • On-board multi-year data logging
Construction & Materials	• Rugged cast aluminum • Stainless steel fasteners • Architectural grade, durable, TGIC powder coat • Standard and custom colors available
Wireless Control	• Easy-to-use interface via iOS smartphone app • Configure and control lighting profiles • Adjust dusk and dawn thresholds • Adjust motion sensor settings
Reliability & Warranty	• Tested for high & low heat and humidity • 5-year warranty • 10+ year battery life • Designed and manufactured in North America
Lighting Profiles	• 11 duration-based profiles • Easily configurable, time-of-night profiles • All profiles pre-programmed or field adjustable • Motion sensing capabilities optimize performance based on usage

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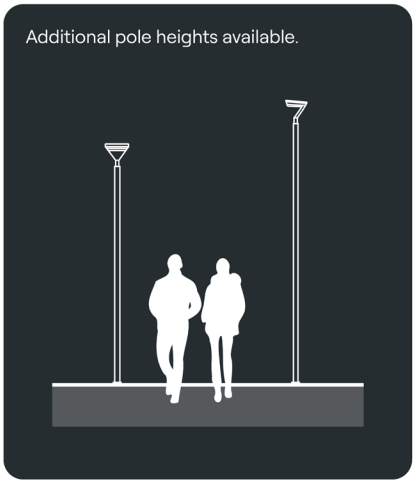
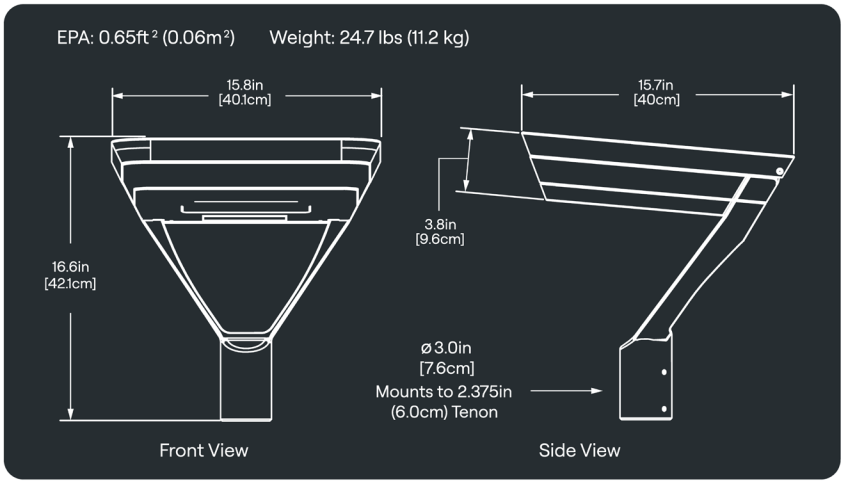
Order Matrix

Series	Mounting	Finish	Distribution	LED	Lighting Profiles	Options
IPL	PTM - Post Top Mount	BK - Black	T2 - Type 2	XW - 2700K	00 - On at dusk > Off at dawn	SEC - Security Fasteners
		BZ - Bronze	T3 - Type 3	WW - 3000K	01 - On at dusk > Off after 6 hours	MSO - Motion Sensor Off
		SV - Silver	T4 - Type 4	NW - 4000K	02 - On at dusk > Dim to 30% after 6 hours > Off at dawn	BLS - Backlight Shield
		WH - White	T4F - Type 4F	AMB - Amber	03 - On at dusk > Off after 5 hours > On 1 hour before dawn> Off at dawn	BLB - Blue Light Blocker
		CC - Custom	T5 - Type 5		04 - On at dusk > Dim to 30% after 5 hours > Brighten to 100% 1 hour before dawn > Off at dawn	
					05 - On at dusk > Off after 3 hours	
					06 - On at dusk > Off after 4 hours	
					07 - On at dusk > Off after 4 hours > On 1 hour before dawn > Off at dawn	
					08 - Off (typically used with motion sensing)	
					09 (Default) - On at dusk > Dim to 30% after 3 hours > Brighten to 100% 1 hour before dawn > Off at dawn	
					10 - On 30% at dusk > Off at dawn	
					TX0000X0000 - T=Real-time based lighting profile. X=Choose O for off, L for Low (30%) or M for Medium (50%) or B for Bright. 000=chose event time between 00:00 and 23:59. Second event optinoal	



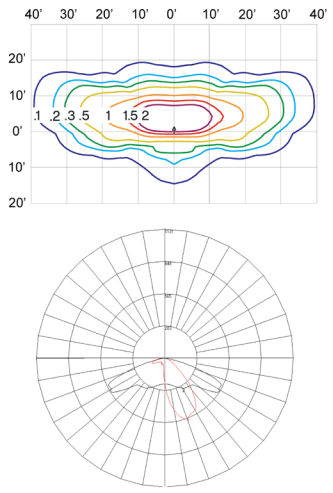


FLT

Certified by DarkSky.org

Photometrics

Type 2



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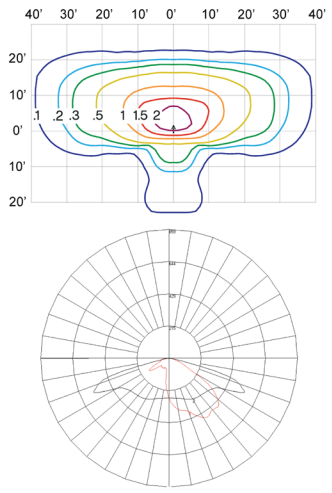

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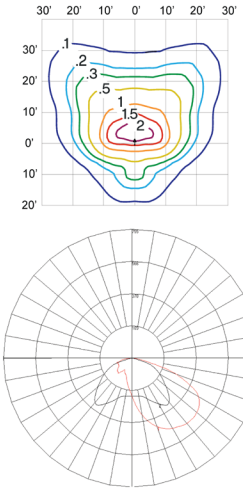

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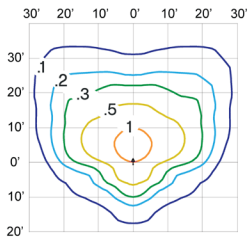

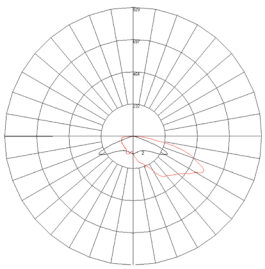

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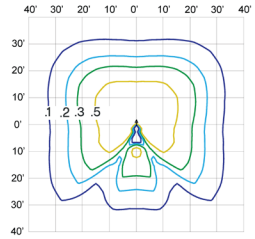

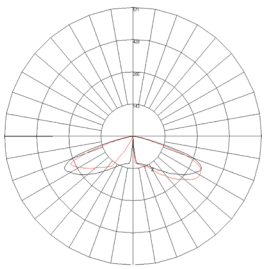

Notes:

1. Plots are calculated using 1360 lumens at 4000K color temperature.
2. Illuminance plots are in foot candles and based on 12 ft mounting height.
3. Polar candela plots are for the 0° and 90° Vertical Planes.
4. Specifications subject to change without notice.
5. IES files available at FLT.com

FLT

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