

Illuminating Recreation:

Best Practices for Parks, Trails & Outdoor Spaces

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Ephesus Sports Lighting Product Manager



Illuminating Recreation

- **Why Lighting Matters Now:**

- Increased demand for extended hours of use
- Rising community expectations (Quality + Experience)
- Greater focus on environmental responsibility
- Increased emphasis on safety and risk management
- Modern facilities are expected to perform after dark, without impacting surrounding communities.
- The challenge isn't just lighting the space, it's balancing performance, control and responsibility.

- **What You Will Walk Away**

- Improve safety + visibility without over lighting
- How to balance playability vs cutoff
- How to use controls effectively
- Reduce light pollution- environmental responsibility

South Fulton Tennis Complex



Apalachee High School



The Problem: Lighting Where It's Not Wanted.

Sky Glow, Trespass Light, Glare, Wasted Energy, wildlife Disruption, neighbor complaints



Traditional Metal Halide(HID)



Modern LED w/cutoff

Traditional Lighting solves visibility but often creates new problems if not properly designed or installed.

Conflicting Priorities

- Safety vs. preserving darkness
- Extending play time vs. protecting nearby communities
- Maximizing performance vs. controlling glare and spill
- Lower upfront cost vs. long-term sustainability
- Playability vs. strict cutoff

Richard Craig Tennis



Start with the Right Questions

- Every sports lighting application is unique with different considerations for budget, existing conditions, environmental factors, stakeholder influence and other variables to be considered. Good Lighting design starts with asking the right questions upfront
- Start by asking 3 questions:
 1. Where do you want your light?
 2. Where do you want your power?
 3. How do you want to control the system?



Apalachee High School



Winder-Barrow High School



Winder-Barrow High School

Where Standards Fit

- Industry standard define the baseline for sports lighting performance.
- Standards like ANSI/IES RP-6 provides recommended lighting criteria for sports and recreational areas
 - Light levels and uniformity
 - Safety and visibility
 - Application (Sport, level of play, facility type)
- **Important Context**
 - RP-6 is a guideline, not a mandate
 - They don't fully address glare perception (User Comfort), spill or environmental impacts.
 - Final Outcome depends on design decisions and priorities.

Table 1-1. Class of Play

FACILITY	CLASS			
	I	II	III	IV
Professional	X			
College	X	X		
Semiprofessional	X	X		
Sports Clubs	X	X	X	
Amateur Leagues		X	X	X
High School		X	X	X
Training Facilities			X	X
Elementary School				X
Recreational Event				X
Social Event				X

Class I: Facilities with spectator capacity over 5,000.
Class II: Facilities with spectator capacity up to 5,000.
Class III: Facilities with spectator capacity up to 2,000.
Class IV: Facilities with limited or no provision for spectators.

Recommended Illuminance Criteria - Outdoor Sport and Recreation

SPORTS	Lighted Area	Class of Play											
		I - over 5000 spectators			II - under 5000 spectators			III - some spectators			IV - no spectators		
		Horiz. FC	Max /Min	CV Max	Horiz. FC	Max /Min	CV Max	Horiz. FC	Max /Min	CV Max	Horiz. FC	Max /Min	CV Max
Baseball & Softball	Infield	150	1.3:1	0.07	100	1.5:1	0.10	50	2:1	0.17	30	2.5:1	0.21
	Outfield	100	1.7:1	0.13	75	2:1	0.17	30	2.5:1	0.21	20	3:1	0.25
Football		100	1.7:1	0.13	50	2:1	0.17	30	2.5:1	0.21	20	3:1	0.25
Rodeo		100	1.7:1	0.17	75	2:1	0.17	50	2.5:1	0.21	30	3:1	0.25
Soccer		75	1.7:1	0.13	50	2:1	0.17	30	2.5:1	0.21	20	3:1	0.25
Tennis		150 Avg	1.5:1	0.10	75 Avg	1.7:1	0.13	50 Avg	2:1	0.17	30 Avg	2.5:1	0.21
Pickleball													
Track					30	3:1	0.25	30	4:1	0.30	20	4:1	0.30
Field					50		0.21	30		0.30	20		0.30
Volleyball & Basketball								30	3:1	0.25	20	4:1	0.30

FC level recommendations based on RP-6-22 Table A-2 Outdoor Sports and Recreation Areas
Horizontal levels are taken at the height of the Visual Task or Task Surface

What Defines Good lighting?

On- Field Performance

- Light levels (Horizontal & Vertical)
- Uniformity and consistency
- Overall playability

Visual Comfort

- Glare Control (Players & Spectators)

Off Field Impact

- Light spill and trespass
- Skyglow & up light

Operational Efficiently

- Energy Usage
- System Flexibility (Controls)

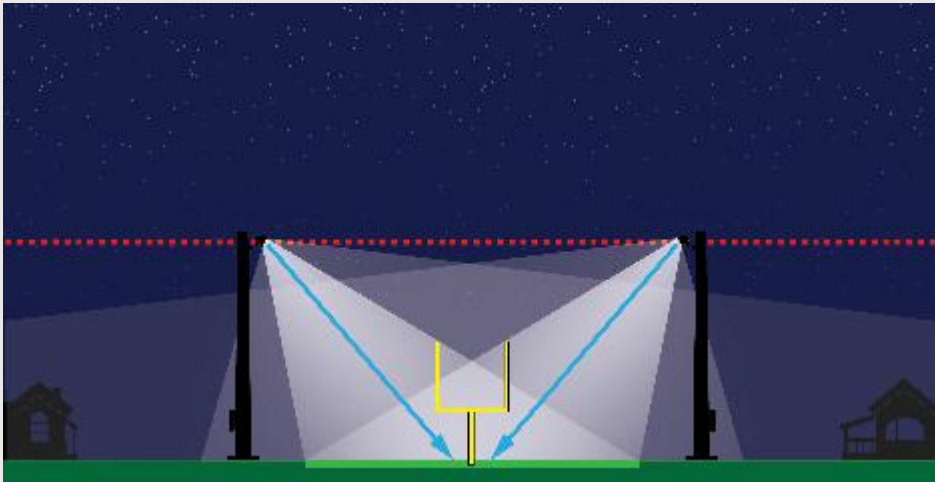
Great Lighting balances all of these not just one metric.

Sprayberry High School



LED Design Strategy: Playability- Focused Design

Playability & Camera focused



Playability Design Intent

- Prioritizes player visibility and ball tracking
- Emphasizes vertical illuminance from multiple viewing angles
- Supports broadcast and streaming performance

Advantages

- Improved airborne ball visibility
- Enhanced player depth perception
- Strong camera images from opposite field views
- Consistent playability across the field

Tradeoffs

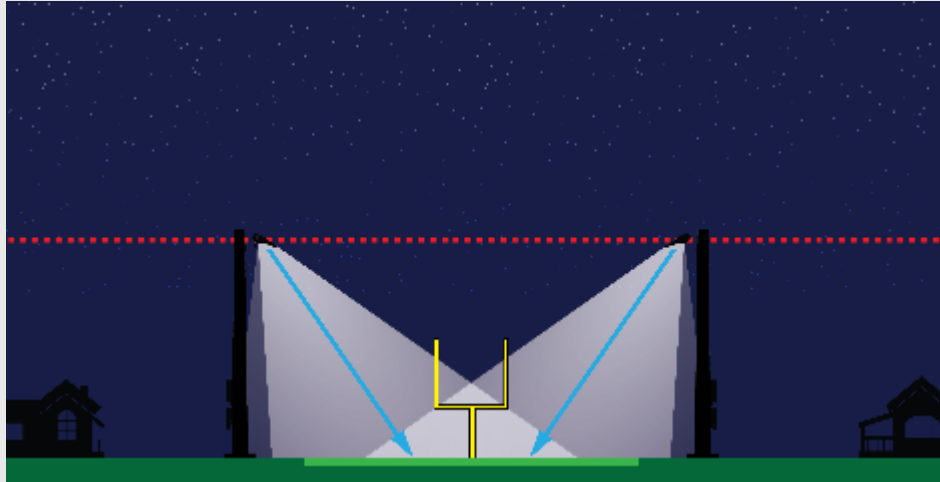
- Increased light beyond the field of play
- Higher potential for glare if not managed carefully
- Requires precise aiming and optical control

Best Suited For

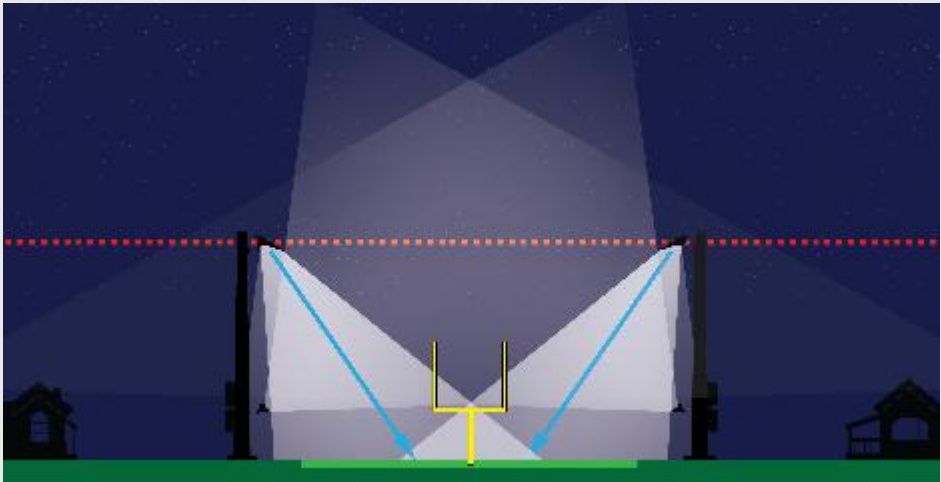
- Competitive athletic environments
- Broadcast or streaming requirements
- Sites without close residential adjacency

LED Design Strategy: Cutoff Focused Design

Cutoff focused



Cutoff focused with Uplighting



Cut off Design Intent

- Prioritizes containment of light within the field footprint
- Minimizes spill, trespass, and up light

Advantages

- Reduced impact on neighboring properties
- Alignment with DarkSky or environmental requirements
- Predictable off-site performance

Tradeoffs

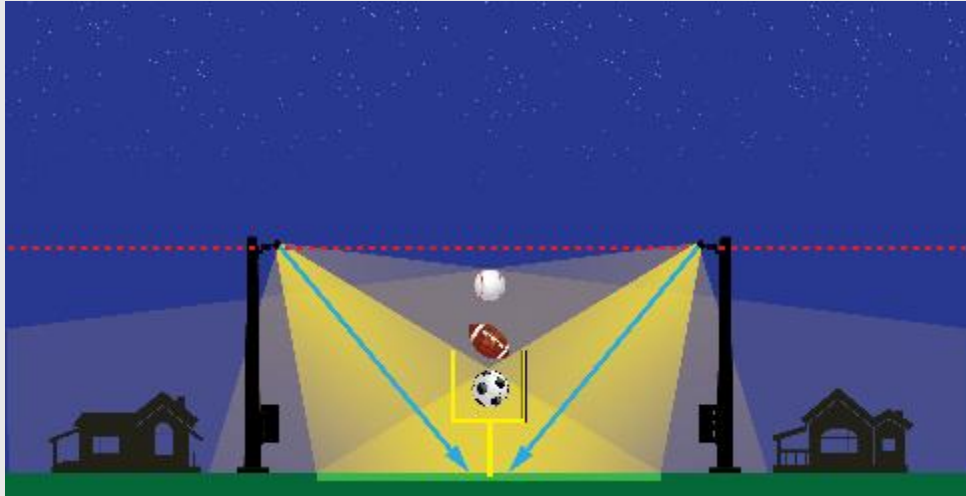
- Reduced vertical illuminance
- Limited camera and airborne ball visibility
- Potential impact on perceived playability

Best Suited For

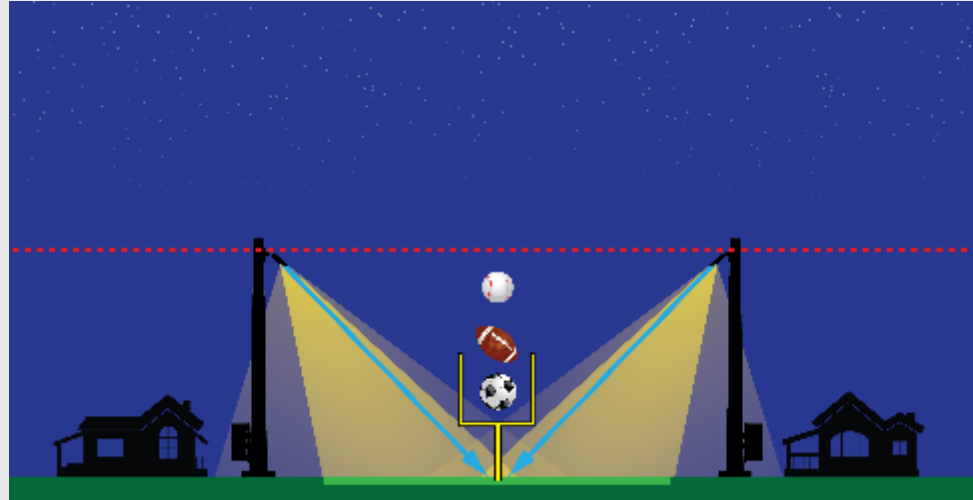
- Residential surroundings
- Environmentally sensitive sites
- Fields with minimal broadcast requirements

LED Design Strategy real life examples.

LED PLAYABILITY



LED CUTOFF



Good Lighting is about balance

- No single design works for every project
- Every solution is a series of tradeoff
- The Goal is to:

Deliver Light where it is needed

Control where its not

Adapt it to the application

Savannah Christian Academy



An aerial, high-angle view of a large sports complex. The complex includes several large green football pitches, multiple tennis courts with blue and orange surfaces, a basketball court with a wooden floor, and a baseball field. There are also smaller recreational areas with water features and playground equipment. The entire scene is overlaid with a dark, semi-transparent filter to make the white text stand out.

**PLAY ANYWHERE.
WIN EVERYWHERE.**

KEY: ● BEST ● BETTER ○ GOOD



MODEL NAME		8	12	16	8 PRISM	16 PRISM
INDOOR	COURTS & GYMNASIUMS	●	○	○	●	○
	FIELDHOUSES	●	●	●	●	●
	ARENAS & STADIUMS	●	●	●	●	●
OUTDOOR	RECREATIONAL BALL FIELDS	●	●	●	●	●
	K-12 SCHOOL STADIUMS & BALL FIELDS	●	●	●	●	●
	COLLEGIATE STADIUMS & BALL FIELDS	●	●	●	●	●
	PROFESSIONAL SPORTS VENUES	●	●	●	●	●
SYSTEM OPTIONS	FIXED CCT	YES	YES	YES	N/A	N/A
	CCT PRO TUNING	YES	NO	NO	N/A	N/A
	RGB FULL COLOR TUNING	N/A	N/A	N/A	YES	YES
POWER CONFIGURATION OPTIONS	LOCAL	YES	NO	YES	YES	YES
	INTEGRAL	YES	NO	NO	NO	NO
	REMOTE	YES	YES	YES	YES	YES
CONTROLS OPTIONS	WIRELESS AIRMESH	YES	YES	YES	YES	YES
	WIRED DMX	YES	YES	YES	YES	YES

Wired DMX & Wireless AirMesh Controls

- Both protocols offered on all Ephesus systems.
- Allows for system alerts, scheduling and on-demand system control.
- Unlimited static and dynamic lighting system scene capabilities.

- New compact pre-aimable integral power configuration optimized for retrofit installations.
- Integral, local, and remote power configuration options.
- Multiple optics, CCT options, and cutoff capable visor.
- Lumen Range Increase: 51,000lm – 111,000lm

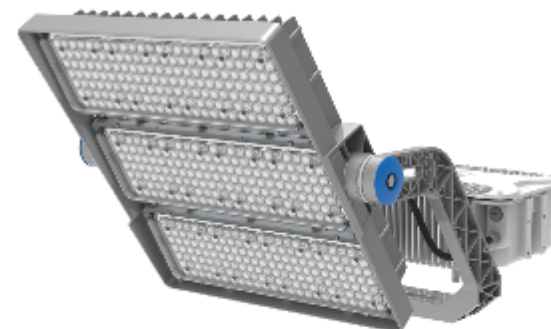
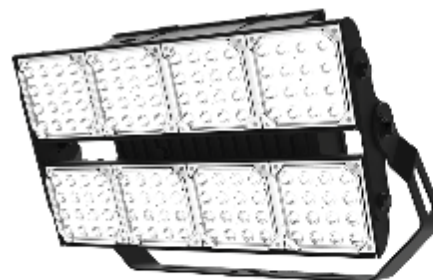
- DarkSky friendly design Available only in remote power configuration option.
- Multiple optics combined with an extreme cutoff capable visor.
- Lumen Range: 100,000lm – 170,000lm

- Best in class performance and reliability for large stadiums.
- Available in both local and remote power configurations.
- Silicone optics allow for lower mounting heights and fewer fixture count.
- Lumen Range Increase: 158,000lm – 202,000lm

- Our most widely utilized RGB luminaire.
- Optimized sources offer the broadest range of RGB full color tuning in LED sports lighting.
- Available in both local and remote power configurations

- Best in class performance and reliability for large stadiums.
- Optimized sources offer the broadest range of RGB full color tuning in LED sports lighting.
- Available in both local and remote power configurations.

KEY: ● BEST ● BETTER ○ GOOD



MODEL NAME		3,4,6-8	3
INDOOR	COURTS & GYMNASIUMS	●	○
	FIELDHOUSES	●	○
	ARENAS & STADIUMS	●	○
OUTDOOR	RECREATIONAL BALL FIELDS	●	○
	K-12 SCHOOL STADIUMS & BALL FIELDS	○	○
	COLLEGIATE STADIUMS & BALL FIELDS	○	●
	PROFESSIONAL SPORTS VENUES	○	●
SYSTEM	FIXED CCT	YES	YES
OPTIONS	CCT PRO TUNING	YES	NO
	RGB FULL COLOR TUNING	N/A	NO
POWER	LOCAL	NO	YES
CONFIGURATION OPTIONS	INTEGRAL	YES	NO
	REMOTE	NO	NO
CONTROLS	WIRELESS AIRMESH	YES	YES
OPTIONS	WIRED DMX	YES	YES

Wired DMX & Wireless AirMesh Controls

- Both protocols offered on all Ephesus systems.
- Allows for system alerts, scheduling and on-demand system control.
- Unlimited static and dynamic lighting system scene capabilities.

LUMAVISION

- Multiple lumen, CCT Pro Tuning, optic types, and accessory options
- Ideal for new construction or retrofit installations
- Lumen Range: 20,000lm – 73,000lm

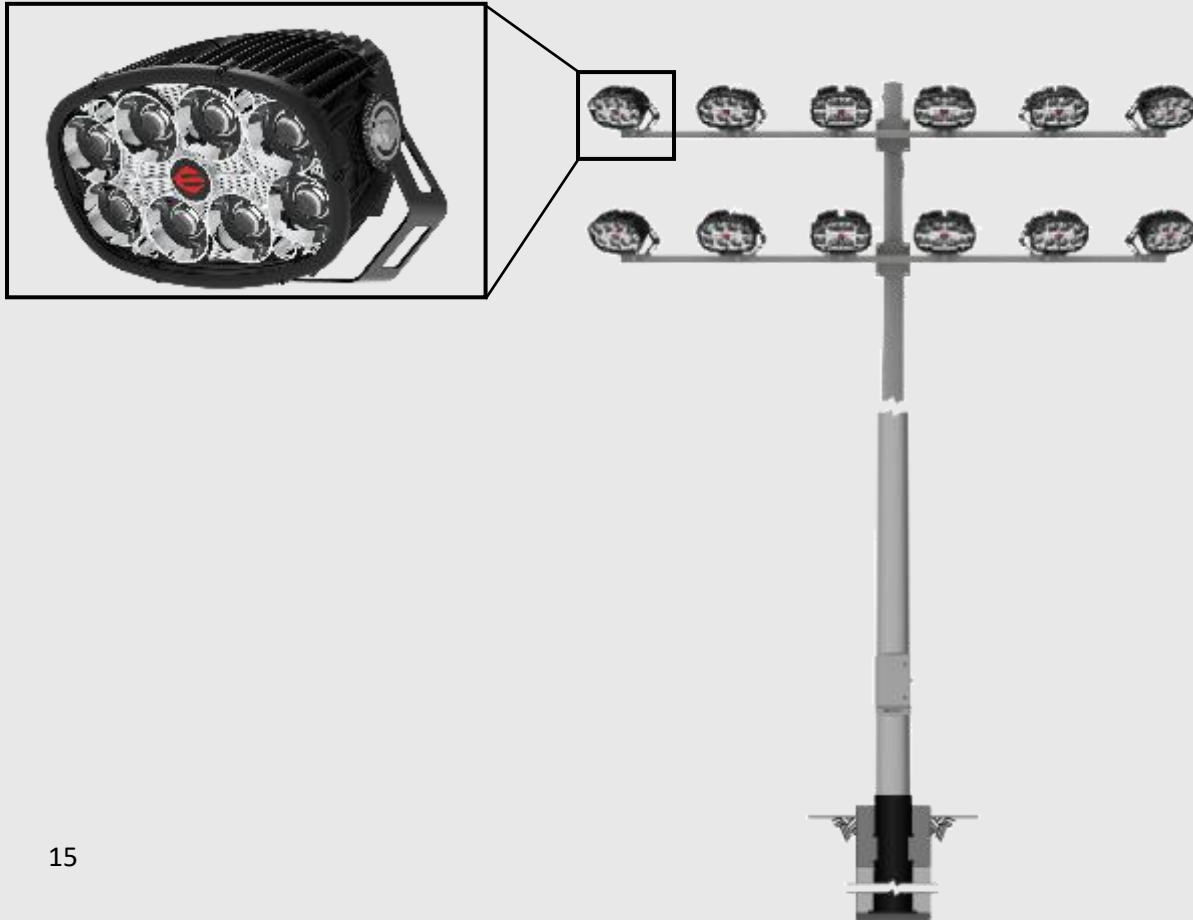
ARENAVISION

- Asymmetric and symmetric light control solutions minimize light spill and glare, enhancing visual comfort and reducing light pollution.
- Offers exceptional light quality and customizable illumination, enhancing the visual experience in large sports venues.
- Lumen Range: 87,000lm – 168,000lm

WHERE DO YOU HAVE YOUR POWER?

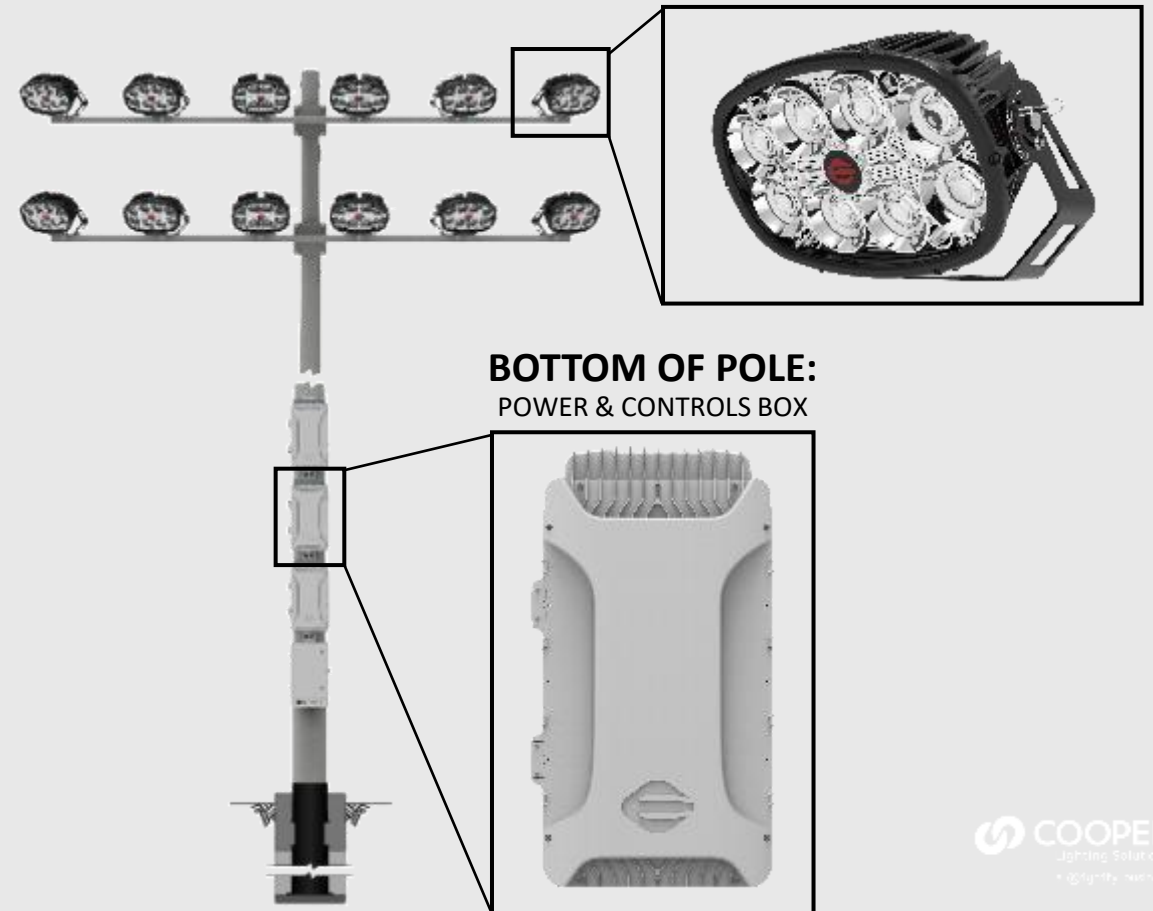
INTEGRAL POWER SYSTEM

TOP OF THE POLE:
LIGHT HEAD, POWER, & CONTROLS



REMOTE POWER SYSTEM

TOP OF THE POLE: LIGHT
HEAD



BOTTOM OF POLE:
POWER & CONTROLS BOX

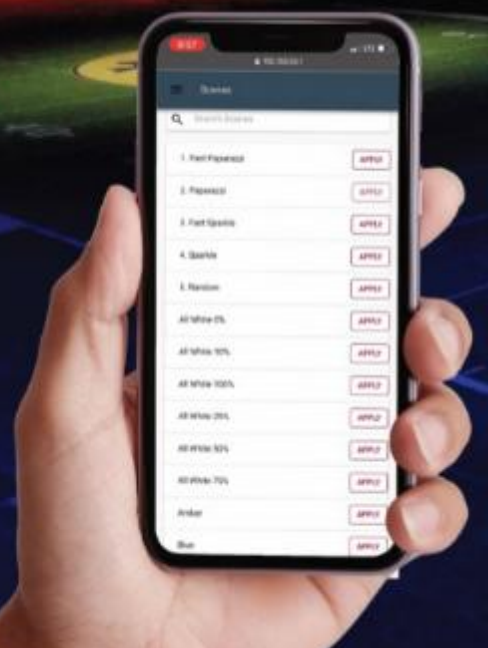
ADVANCED CONTROLS CAPABILITY



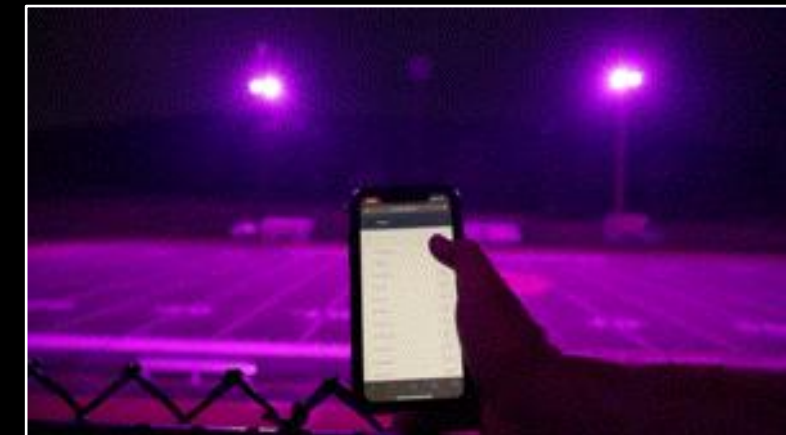
CONTROL

THE SYSTEM THE LIGHTS THE PRESENTATION THE COSTS

- CONTROL FROM YOUR CELL PHONE 
- REDUCE MAINTENANCE & ENERGY COSTS 
- DIM FROM 0 TO 100% 
- LIGHT THE STADIUM, NOT THE NEIGHBORHOOD 
- CREATE COLORFUL LIGHTSHOWS 



Light Zone	Control
1. Front Field	ON/OFF
2. Back Field	ON/OFF
3. Front Stand	ON/OFF
4. Back Stand	ON/OFF
5. Rooftop	ON/OFF
All White 0%	ON/OFF
All White 10%	ON/OFF
All White 20%	ON/OFF
All White 30%	ON/OFF
All White 40%	ON/OFF
All White 50%	ON/OFF
All White 60%	ON/OFF
All White 70%	ON/OFF
All White 80%	ON/OFF
All White 90%	ON/OFF
All White 100%	ON/OFF
Color	ON/OFF
Blue	ON/OFF



Lighting That Adapts in Real Time

Enable dynamic lighting functionality with Air Mesh



MULTI-LAYERED OPTICAL SYSTEM & GLARE CONTROL

LUMASPORT 12

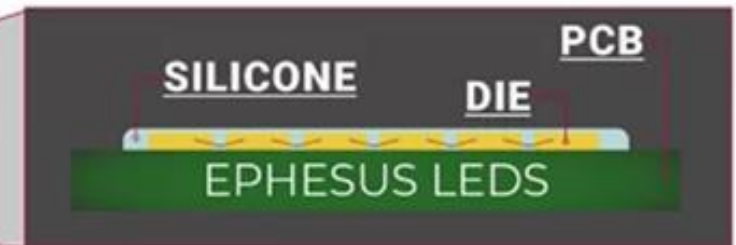
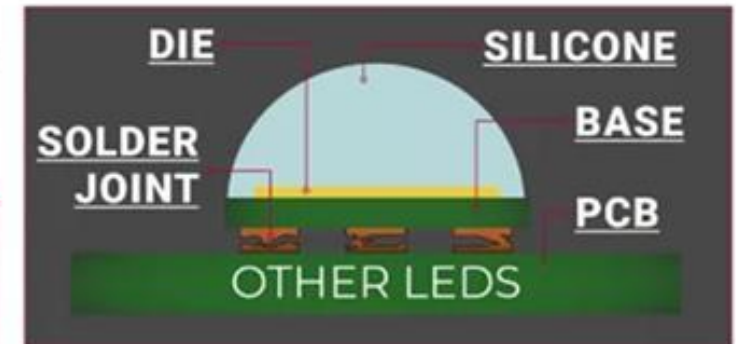
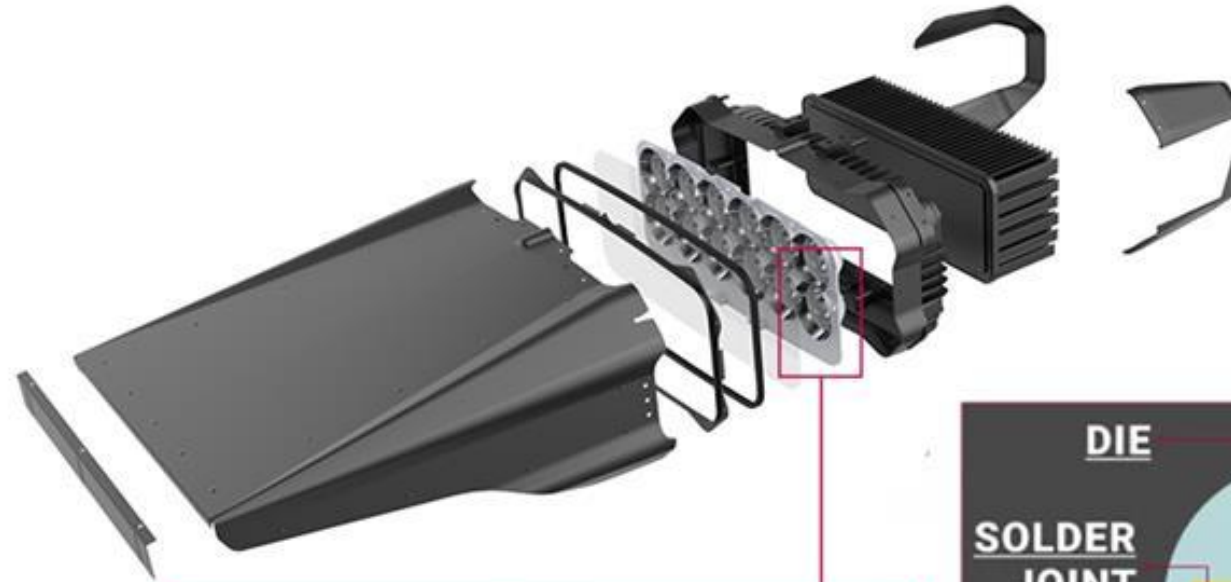


FEATURE:

An Ephesus tested and award-winning **Hybrid LED Optics** assembly seamlessly and efficiently combines TIR Silicone with Reflector optics to prioritize and balance light delivery, cutoff, glare control and playability.

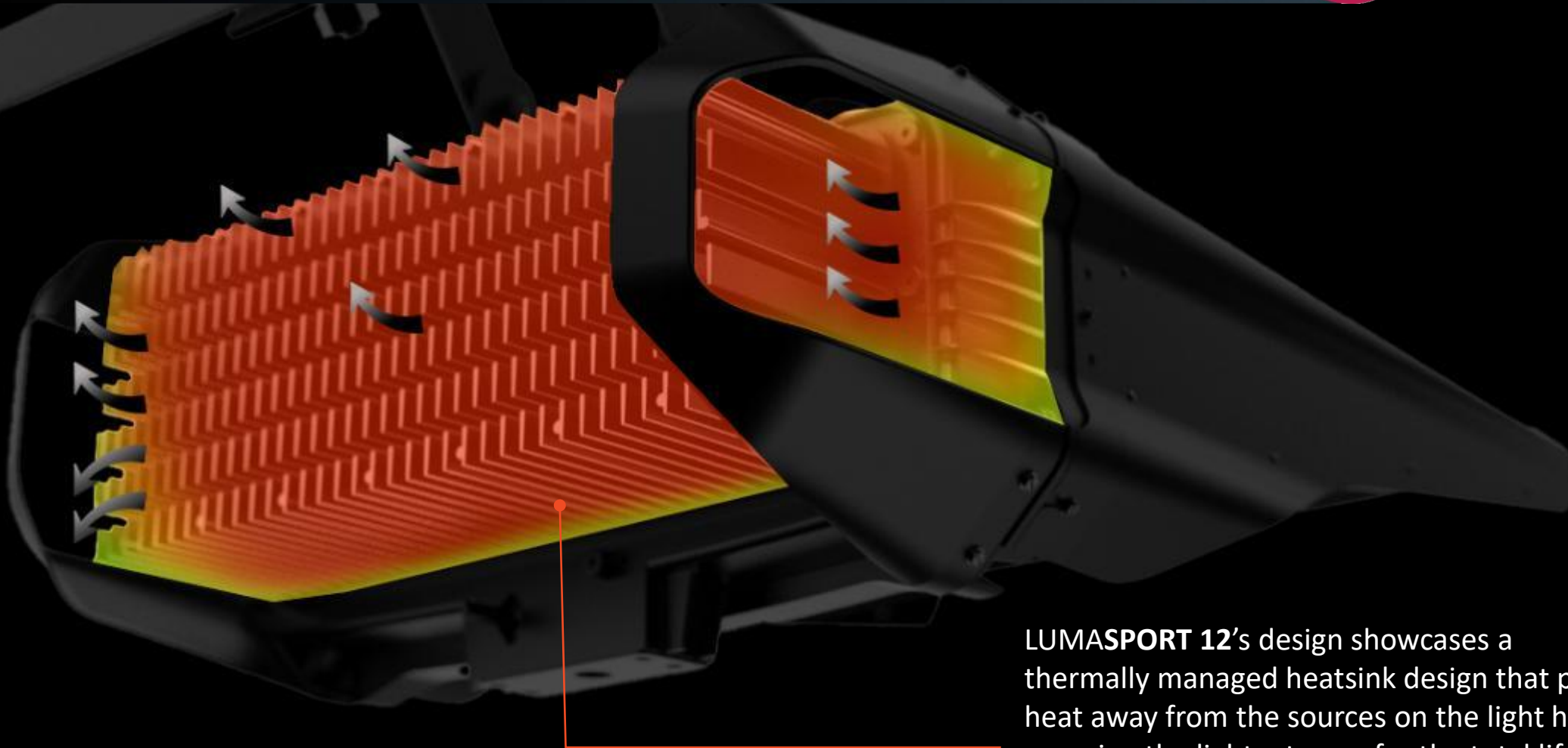
PERFORMANCE BENEFITS:

- *Maintain light levels*
- *Maintain Safety*
- *Reduce maintenance cost*
- *Reduce downtime*
- *Eliminate glare complaints*



RELIABILITY – STAY COOL UNDER PRESSURE

Cold Forged Heatsinking for Thermal Management



LUMASPORT 12's design showcases a thermally managed heatsink design that pulls heat away from the sources on the light head ensuring the lights stay on for the total life of the system.

HOT

HEAT SCALE

COLD

DarkSky Friendly Design

LUMASPORT 12 with Extreme Cutoff Visor (ECV)



Minimizes spill light, preserving
surrounding natural nightscapes and
supports DarkSky sports compliance





An easy-to-install, reliable, modular sports lighting system with options that put light and power where you want it based on each project's particular challenges.



NOT ALL MANUFACTURERS ARE CREATED EQUAL

THE EPHEsus APPROACH



A TRUE SPORTS LIGHTING MANUFACTURER

signify

COOPER
Lighting Solutions

ephesus
SPORTS LIGHTING

- A business unit of Signify, the world leader in lighting
- Designed and Engineered by world class lighting engineers at Cooper Lighting Solutions
- Rigorously Tested, Reliable Components



DELIVERY

- Direct sale to customer



PARKS & RECREATION FACILITY

**PARTS AND LABOR WARRANTY
BACKED DIRECTLY BY
EPHESUS/COOPER/SIGNIFY**

OTHERS APPROACH



UNKNOWN OVERSEAS LIGHTING MANUFACTURER

- Cheap design
- Unreliable Components
- Future existence unknown
- No contact information



LUMINAIREs SHIP OVERSEAS TO UNITED STATES

- Unknown product shipping conditions
- High risk for product damage and loss



DOMESTIC COMPANY SELLING LUMINAIREs

- No control of manufacturing process or material quality



DELIVERY

- Fixtures sold and delivered to school acting as manufacturer



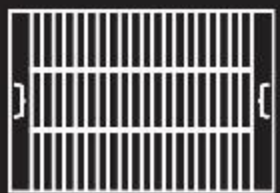
PARKS & RECREATION FACILITY

**LONG-TERM WARRANTY
NEEDS WITH NO INFORMATION
ON WHO TO CONTACT?**

TURN-KEY LED SPORTS LIGHTING SOLUTIONS



NEW & RETROFIT INSTALLATIONS FOR OUTDOOR & INDOOR VENUES



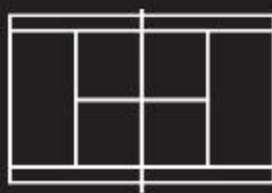
FOOTBALL



BASEBALL
SOFTBALL



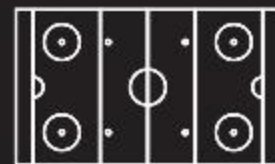
SOCCER



TENNIS



BASKETBALL



HOCKEY

PLAYBOOK: RETROFIT INSTALLATIONS

UPDATE YOUR CURRENT BALL FIELDS

✓ SITE ASSESSMENT & PROPOSAL

✓ DESIGN & DELIVER

✓ INSTALL & TEST



PLAYBOOK: NEW PROJECT INSTALLATION

BUILDING FROM THE GROUND UP



SITE ASSESSMENT & PROPOSAL



PREPARATION & PROCUREMENT



POLE ASSEMBLY



RAISE THE POLE ASSEMBLY



EASY FULL TURN-KEY SYSTEM SOLUTIONS

GET A FREE QUOTE AND LIGHTING PROPOSAL

PREFERRED PRICING

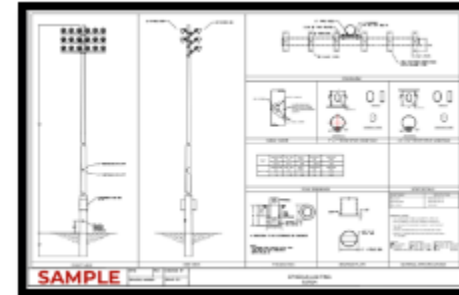
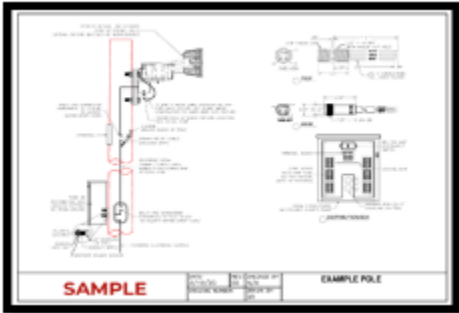
CO-OPERATIVE
PURCHASING & FINANCING OPTIONS

FULL SYSTEM INSTALL

TURN-KEY
PROJECT PROPOSAL

YOU'RE COVERED

10 YEAR PARTS
WARRANTY WITH
LABOR OPTION





RELIGHT YOUR SCHOOL



REDUCE
MAINTENANCE &
ENERGY COSTS



CONTROL
FROM YOUR
CELL PHONE



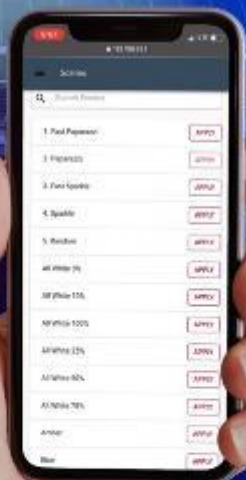
SCHEDULING



CREATE
COLORFUL
LIGHTSHOWS



LIGHT THE
STADIUM,
NOT THE
NEIGHBORHOOD



EPHESUSLIGHTING.COM

EPHESUS RE-LIGHT YOUR SCHOOL PROMOTION

THE TIME IS NOW FOR LED SPORTS LIGHTING
RETROFIT

RE-LIGHT YOUR SCHOOL PROMOTION

MORE COMMISSIONS FOR YOU



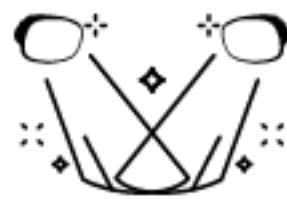
- Focus on your local market schools ***that currently have outdoor sports lighting systems*** (football, soccer, baseball, softball) with metal halide (HID) lighting today.
- Identify and make contact with appropriate personnel (director of facilities, superintendent, athletic director,...) and secure a meeting (in person or via Teams) for you and your Ephesus RSM prior to 6/30/2026 to discuss the benefits and options for upgrading to an Ephesus LED system. Complete registration form ([Ephesus Re-Light Your School Promotion \(cognitoforms.com\)](https://cognitoforms.com)) and once approved receive \$100 bonus commission.
- Work with your Ephesus RSM to generate a proposal to upgrade lighting to Ephesus LED and work to close/sell (ship) that project by 12/31/2026 receive \$2,500 for a football or soccer field, \$2,000 for a baseball field, and \$1,500 for a softball field.

RE-LIGHT YOUR SCHOOL PROMOTION

FREQUENTLY ASKED QUESTIONS (FAQs)

- **What type of project is eligible?**
 - *Any public or private school in your agent territory that currently has lit outdoor fields (baseball, soccer, football, softball).*
- **Who is eligible to receive the \$100 for the meeting and potential larger payout for the sale?**
 - *Your RVP will work with your agency leadership to determine who is eligible. The bonus will be paid through agent commissions and should be distributed by the agency to the eligible participants. To register the lead go to [Ephesus Re-Light Your School Promotion \(cognitoforms.com\)](https://cognitoforms.com)*
- **When will the payments be made?**
 - *After a submission and meeting has been approved, bonus will be paid within 1-2 commission cycles. For the sales bonus, the bonus will be paid the month following the shipment/sale.*
- **Who is my direct contact for this program?**
 - *Your assigned Ephesus Regional Sales Manager is your primary contact.*

GET STARTED - DON'T GET LEFT ON THE SIDELINES!



LETS TALK » WHAT ARE YOUR NEEDS? » LET'S GET IT PERFECT » GAME ON!

- PHONE
- EMAIL
- VIRTUAL OR IN-PERSON MEETING

- SITE EVALUATION
- FREE LIGHTING DESIGN
- BUDGETARY PLANNING
- QUOTE
- INSTALLATION PLANS

- TURNKEY INSTALLATION
- FINANCING AVAILABLE
- FULL COVERAGE WARRANTY

▼ **SCAN ME** ▼



SIMPLIFY YOUR BID PROCESS!

Ephesus is an approved Cooperative Purchasing Group Contract Vendor in every State.

Questions?

terry.tuper@cooperlighting.com
325-247-8385



Georgia Power Contact:
Mike McCowen
(470) 723-4221

