

A Spark Lighting solution for



The City of Angleton, Texas
BG Peck Youth Soccer Field Illumination

Stewart Crouch
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Version Two

Materials Only



BUYBOARD PROPOSAL NUMBER 690-23:
ENERGY SAVING LIGHTING PRODUCTS

June 4, 2024

Proposal prepared by:
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About Spark Lighting

Founded in 2011, Spark Lighting is an independent *turnkey* lighting company that specializes in the assessment, design, sourcing and installation of commercial, industrial, & sports LED lighting in Houston, Dallas, Austin, and San Antonio. Spark's numerous lighting solutions range from Parking, Area, Warehouse, Canopy, Cans, Troffer, Linear, Wall-pack and Flood lights for interior and exterior applications.

What We Do:

Assessment: Our team will conduct a site survey and provide a detailed analysis of the existing lighting system and energy consumption.

Design: Using state of the art software, we are able to provide 2D and 3D models showing the new fixture layouts and the amount of light that will be delivered. We design all lighting around the IES guidelines.

Installation: Our team of installers consists of Master and Journeyman Electricians that have years of experience installing the most complex lighting systems. You will receive the highest quality service from our team.

Expertise: Our team spends countless hours in training, lighting schools, and expos learning about the latest changes and technology so that we can stay at the forefront of the lighting industry. You will not find a more knowledgeable staff when it comes to lighting.



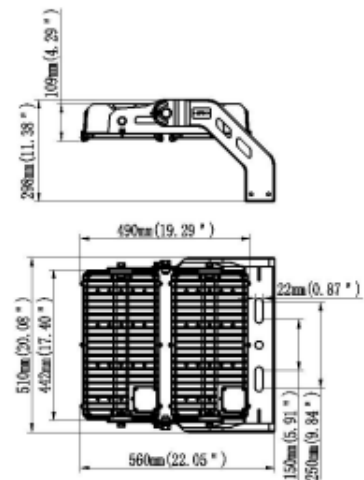
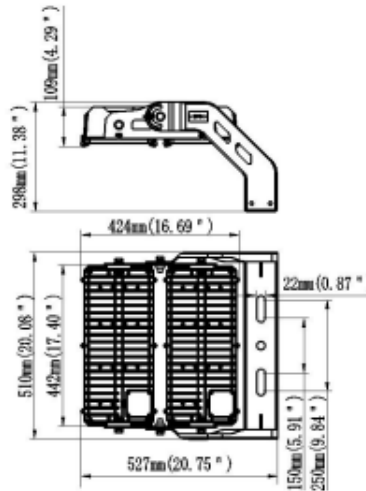
Pearsall ISD Sports Lighting Upgrade Project

Recommendation for LED Sports Lights

- No bulbs to replace, minimal maintenance
- 5 year warranty on fixtures
- Environmentally friendly –800W/112,000 Lumens each
- **Brighter** and more even illumination = greater safety for residents and visitors
- Projected **190,000** hours **L70 Lifespan** at approximately 25°C



1200W



Photometric Simulation of Light Levels

BG Peck Soccer Complex

Project Name: BG Peck Soccer Complex

Pole: 9 pcs

Lamp: 72 pcs

Mounting Height: 75ft

Reference Standards: UIL

Maintenance Factor: 0.8

Soccer Field 1: 32.16 FC

Max/Min: 2.43

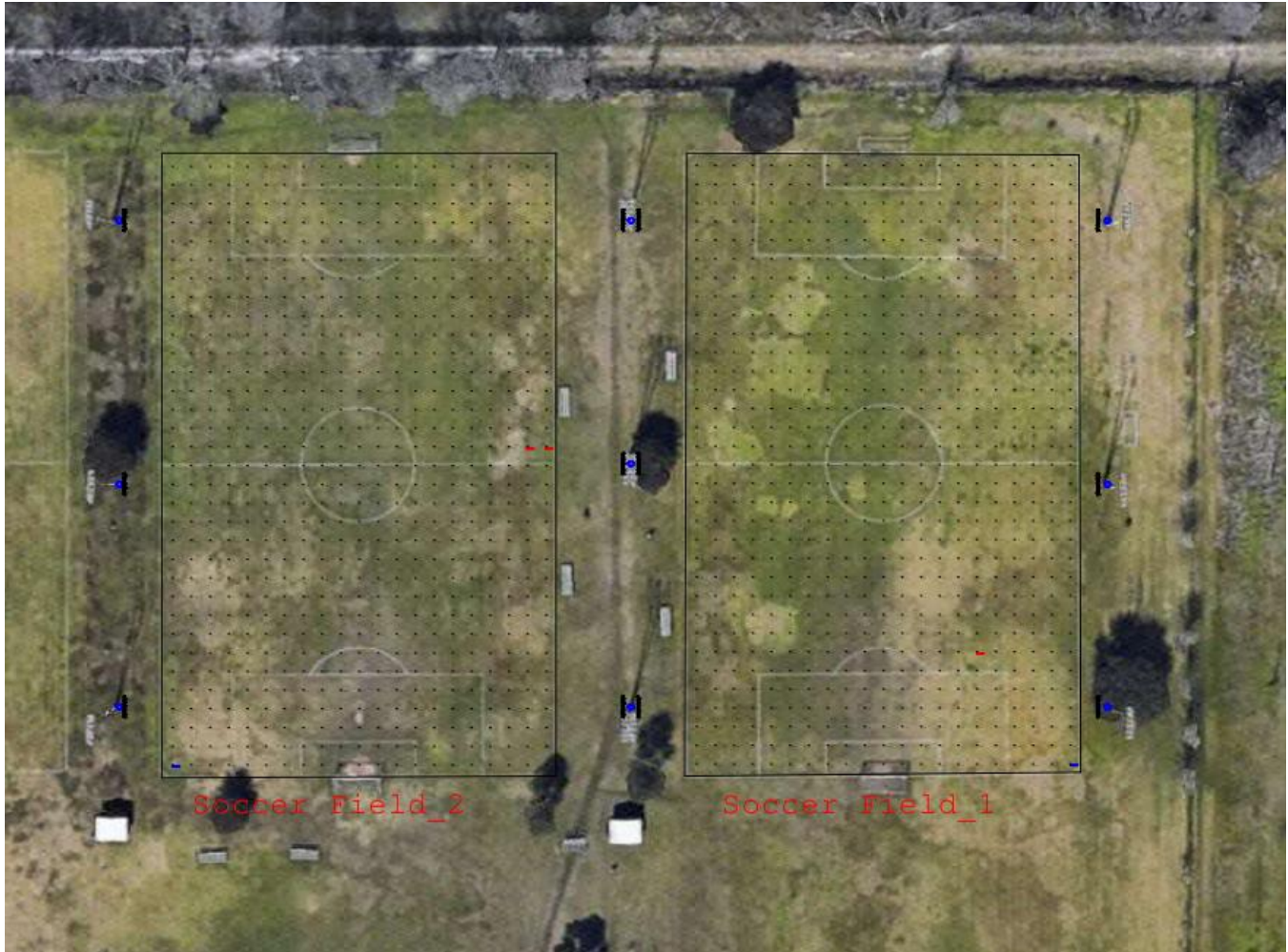
Soccer Field 2: 30.00 FC

Max/Min: 1.88

The calculation values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, where by gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data. This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

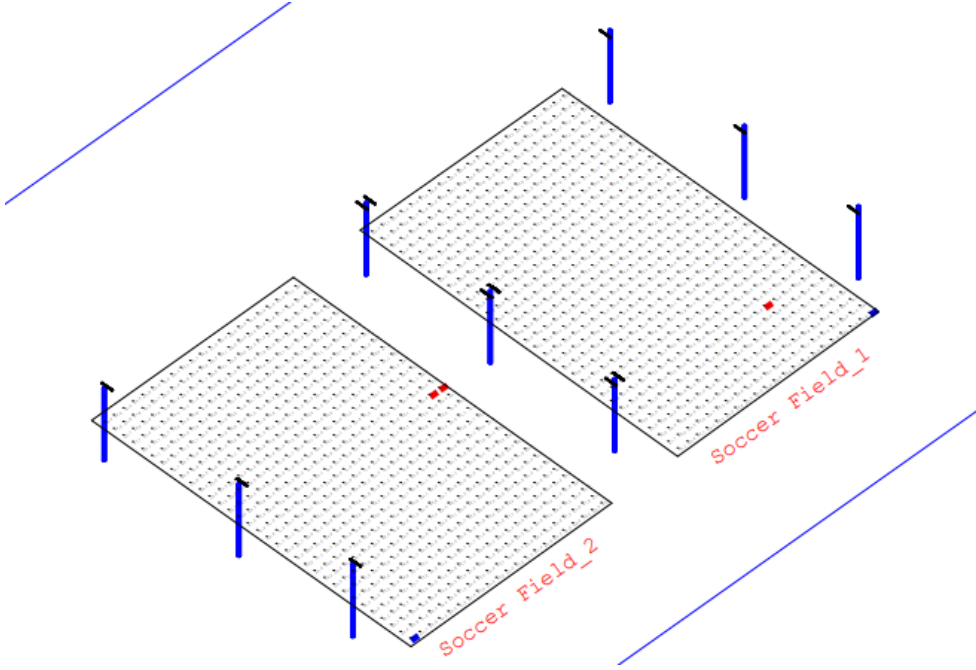
Photometric Simulation of Light Levels, Continued

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	Lum. Watts	LLF
☐	72	SP04-800-5770-F04001Z	SINGLE	119020	804.926	0.800



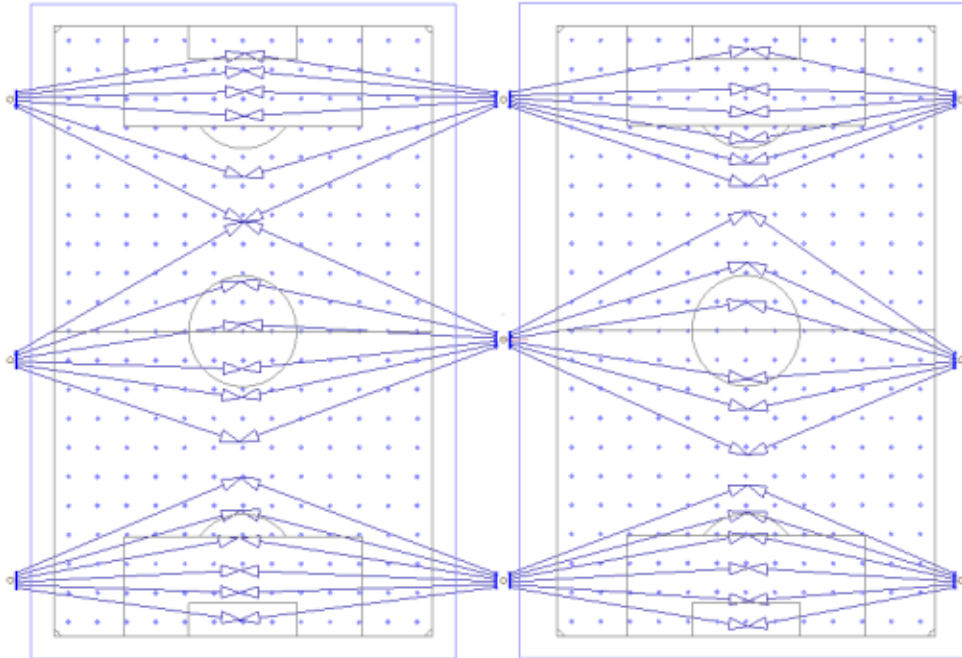
Photometric Simulation of Light Levels, Continued

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	Lum. Watts	LLF
☐	72	SP04-800-5770-F04001Z	SINGLE	119020	804.926	0.800



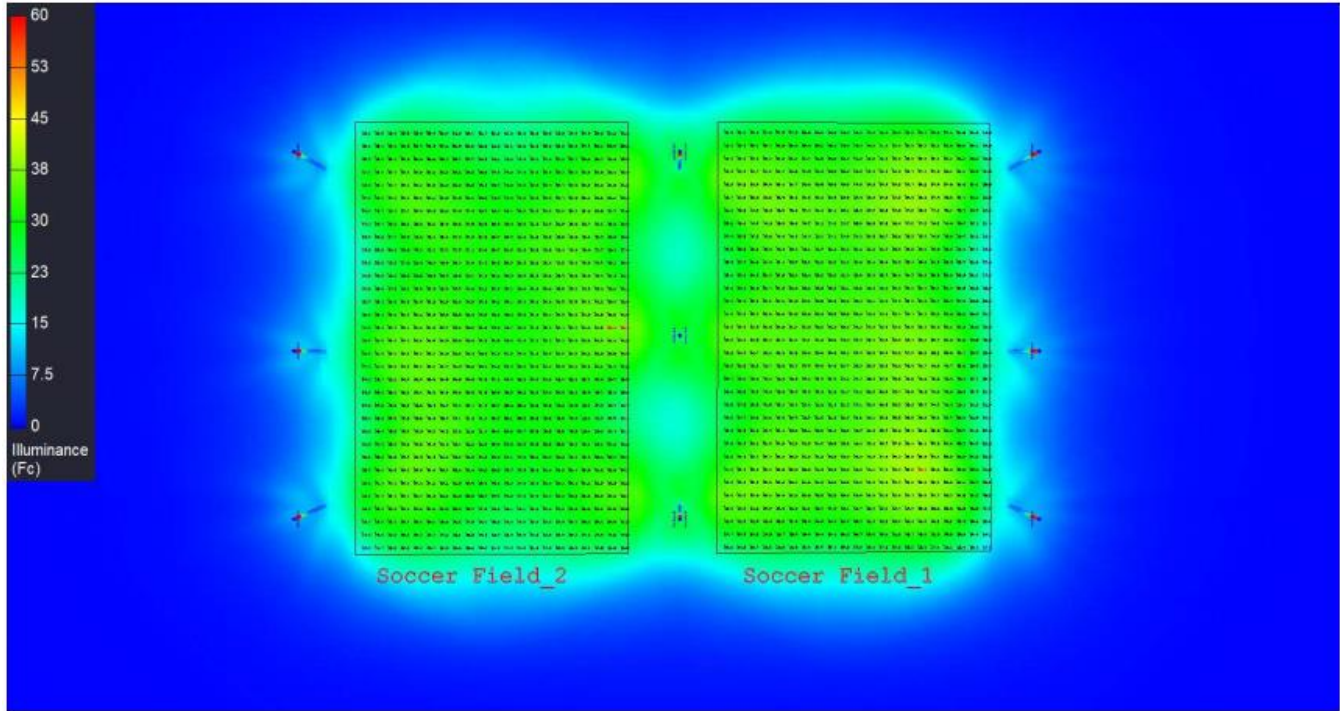
Photometric Simulation of Light Levels, Continued

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Base Proposal Pricing

Turnkey Pricing Options for Lighting Project				
Part #	Qty	Description	Unit Price	Total
SP04-800-5770-F04003Z	72	ACG Lighting's SP04 LED Sports Light, 800W/112,000 lumens in 5000K CCT, 30° Beam angle, 277V-480VAC, Fixtures per crossarm/pole as per photometrics	Included	Included
CONTROLS	-	Lighting to be controlled in the same manner as previous to the project. No changes to controls are included.	Included	Included
WARRANTY	-	5 Year Manufacturer's Warranty	Included	Included
Base Proposal Pricing Total				\$115,200.00
Sales Tax if Applicable				EXEMPT
Net Investment				\$115,200.00
Estimated Lead Time for Lighting Materials: 3-4 Weeks				

Terms & Conditions

1. Materials total amount due upon order.
2. Hardware subject to manufacturers' standard warranties.
3. Change/Add-on Orders: As part of the pre-sale inspection of customer's facilities, Spark Lighting or its agent has conducted a thorough survey and have documented its findings as listed herein. However, due to hidden situations, oversights or changes since the survey, 100% accuracy is not always achievable. Therefore, if it is necessary to add, change or delete material or labor to deliver the result desired by the customer, change orders may be required. If a situation arises where it is necessary to add, change, or delete any material or labor, customer will be presented with such situation and costs for any prior approval. Charges or credits for approved changes will be issued to customer under the original purchase order at the completion of the project.
4. All listed scope of work in this estimate is based upon a one-time site visit, using information gathered in conjunction with Customer provided documents and data. Inaccuracies occur occasionally and change orders may be triggered.
5. Spark is not responsible for any code violations outside the listed scope, any existing code violations on the property has currently or any code violations
6. Limitation of Liability: In no event shall Spark Lighting be liable to customer under any legal of equitable theory of liability for any indirect, incidental, consequential or special losses or damages whatsoever arising from or relating to this proposal.
7. Proposal is valid for (90) days.

I hereby accept and authorize the work set forth above or attached hereto:

Signed: _____ Date: _____

**Manufacturer's Supporting Specification Sheets for Materials and/or
General Supporting Documentation to Follow, if available.**



Specifications - SP04 LED Sports Light

Version: 8.2



Description

SP04 series LED sports light offer 56,000lm-180,000lm, flexible solution to cover medium and large stadium lighting projects. The modular design support single LED module tilt adjustable, to achieve precise lighting performance. With special materials and surface treatment, SP04 offer excellent anti-corrosion ability, it is a good choice for harbour lighting.

Key Features

- Modular design 400W 500W 600W 800W 1000W 1200W.
- No backlight, no up-light and no spill light.
- Professional and unique optics options could effectively control glare and ensure the good uniformity.
- Adjustable bracket design obtains the best uniformity.
- Excellent anti-corrosion performance.
- Provided with 20KV surge protection devices.
- IP66 and IK08 protection.

Applications

- Square
- Outdoor stadium
- Exhibition center
- Soccer field
- Airport
- Railway station

Electrical Information						
Model No.	SP04-400	SP04-480	SP04-600	SP04-800	SP04-960	SP04-1K2
Power Consumption(±5%)	400W	480W	600W	800W	960W	1200W
Power Supply	Done driver/uPowerTek					
Input Voltage	120-277VAC, 50/60 Hz/277-480VAC, 50/60 Hz					
Power Factor	+0.97					
Surge Protection	10KV line-line /20KV line-earth					
Driver Type	Constant Current (CC)					
Control	0-10V Dimming,DMX					

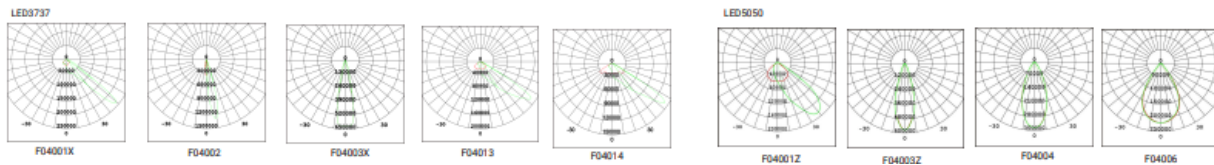
Optic Information						
LED Type	LED3737					
Luminous Flux (±10%)	56000lm	67200lm	84000lm	112000lm	134400lm	168000lm
Efficacy(5700K Ra70)	140lm/W					
Beam Angle	F04001X,F04002Z,F04003X,F04013,F04014					
Correlated Color Temperature	5700K (3000K, 4000K optional)					
Color Rendering Index	Ra70 (Ra80, Ra90 optional)					
UGR level	NA					
LED Type	LED5050					
Luminous Flux (±10%)	60000lm	72000lm	90000lm	120000lm	144000lm	180000lm
Efficacy(5700K Ra70)	150lm/W					
Beam Angle	F04001Z,F04003Z,F04004,F04005					
Correlated Color Temperature	5700K (3000K, 4000K optional)					
Color Rendering Index	Ra70 (Ra80, Ra90 optional)					
UGR level	NA					

Dimensions and Mount						
Product Dimension	479x250x185mm	479x266x185mm	479x283x185mm	510x429x232mm	510x527x298mm	510x560x298mm
Luminaires Net Weight (±0.3kg/±0.66lbs)	Lamp body: 6.3kg(13.89lbs) Driver box: 3.6kg(7.94lbs)	Lamp body: 7.0kg(15.43lbs) Driver box: 4.2kg(9.26lbs)	Lamp body: 7.8kg(17.20lbs) Driver box: 4.7kg(10.36lbs)	Lamp body:13.7kg (30.20lbs) Driver box:5.4kg(11.90lbs)	Lamp body:16.4kg (30.62lbs) Driver box:6.6kg(14.55lbs)	Lamp body:18.8kg (41.45lbs) Driver box:8.6kg(18.96lbs)
Export Carton Size	510x355x250mm	510x370x250mm	510x400x250mm	600x570x250mm	715x610x265mm	750x610x265mm
Gross Weight (±0.3kg/±0.66lbs)	10.9kg(24.03lbs)	12.3kg(27.12lbs)	13.8kg(30.42±0.66lbs)	22.2kg(48.92±0.66lbs)	26.4kg (58.20lbs)	29kg(63.93lbs)
Mounting Option	Bracket mounting					
Material	Aluminum alloy					
Finish	Polycarbonate optical lens and glass cover					
Finish	Powder coating					
Fixture Color	Black (RAL9017)					
EPA	0.09m ² /0.96ft ²	0.11m ² /1.15ft ²	0.12m ² /1.34ft ²	0.18m ² /1.92ft ²	0.22m ² /2.3ft ²	0.24m ² /2.68ft ²
IK Rating	IK08					
IP Rating	IP66					
Category of corrosion	C4					

Lifespan and Warranty	
Operating Temperature	-30°C to +50°C (-22°F to 122°F) 82000hrs-L90
Life Time of LED @Ta=25°C (3737)	197000hrs-L80 326000hrs-L70
Life Time of LED @Ta=28°C (8000)	55000hrs-L90 118000hrs-L80 190000hrs-L70
Warranty	5 years

New Features	
1.	Visor is adjustable.
2.	DMX control available.
3.	Light weight and compact size.
* Please consult us for details.	

Photometry



Mounting Options

Bracket mounting

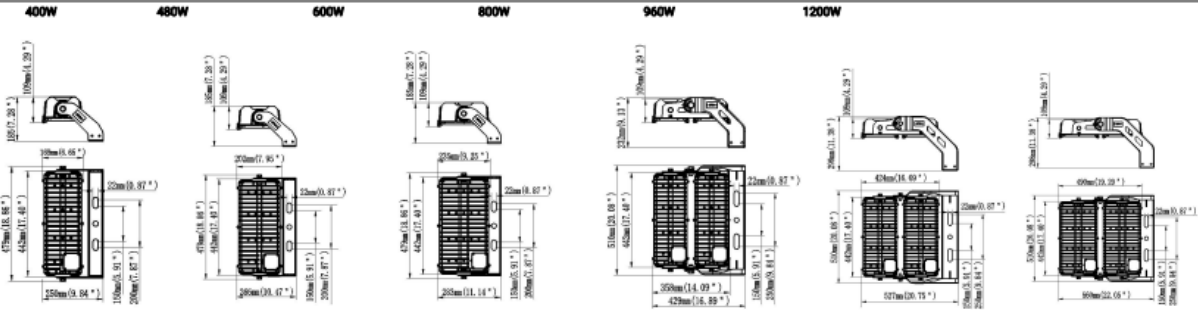


400W/480W/600W



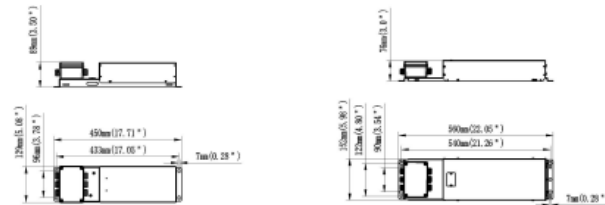
800W/960W/1200W

Vertical Installation



400/480/600W driver

800/960/1200W driver



Accessories



Precision Aiming Device
 AL1060 materials with outdoor powder coating.
 Accurate adjustment of luminaire projected position.
Code: BC-S04-02



Visor
 SPCC materials with outdoor powder coating.
 (L130 for F04002, F04003K, F04003Z, F04004, F04005)
Code: BC-S04-01



Visor
 SPCC materials with outdoor powder coating.
 (L39 for F04001X, F04001Z, F04013, F04014)
Code: BC-S04-03

LED Lighting Value Statement



Energy Savings

70%-75%

Operational Savings

Nearly maintenance free (*50k-200k lifetime hours*)

Safety

Bright, clean, reduced glare

Environmentally friendly

No mercury, no lead

Durability

Tolerance to temperature variation, no bugs

Dimming

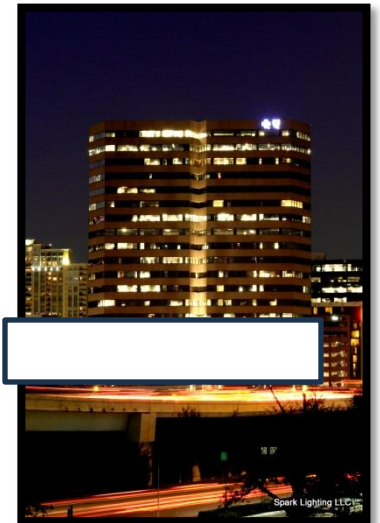
Precisely controlled with sensors, increased savings

Quality

Property value, modernization, marketability

Certification

LEED, Green Certified, Eco-friendly, Energy Star



LED Lighting References

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Letter of Recommendation



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To Whom It May Concern,

At Waterway Plaza I & II in The Woodlands, we try to implement the most efficient and cost effective measures that conserve energy, reduce maintenance costs, and have minimal impact on the environment. Our exterior lighting was one the areas that needed to be assessed, so in 2015, we collected multiple bids to upgrade the lighting to LED.

The factors that we considered were energy efficiency, quality of product, long warranties backed by well-known lighting manufacturers, and price. The company that we ultimately selected was Houston-based, Spark Lighting. They recommended extremely well made products by top lighting companies such as Cree, Philips, and Terralux.

We were also impressed that Spark provided a very competitive, turnkey price that included removal of existing fixtures, installation of new fixtures, and a ten year warranty on the parking garage fixtures. The scope of work provided by Spark was as follows:

- Upgrade (751) existing T8 garage lighting to (405) Cree LEDs with motion sensors and daylight harvesting sensors
- Upgrade (17) existing 400-watt metal halide pole lights to Cree LED pole lights
- Replace (59) T8 stairwell fixtures to LEDs with motion sensors
- Replace (4) 175-watt metal halide wall packs to Cree LED wall packs
- Retrofit (114) 100-watt can lights with Terralux LEDs

For a project this large, Spark Lighting did a phenomenal job of communicating throughout the entire process and making sure it was completed on schedule. We are extremely happy with the LED upgrade and love the energy savings! I would highly recommend Spark Lighting for any commercial LED lighting work.

Sincerely,

Cindy Niles, CPM®
General Manager