MaxLite

A NEW WAVE OF LIGHT



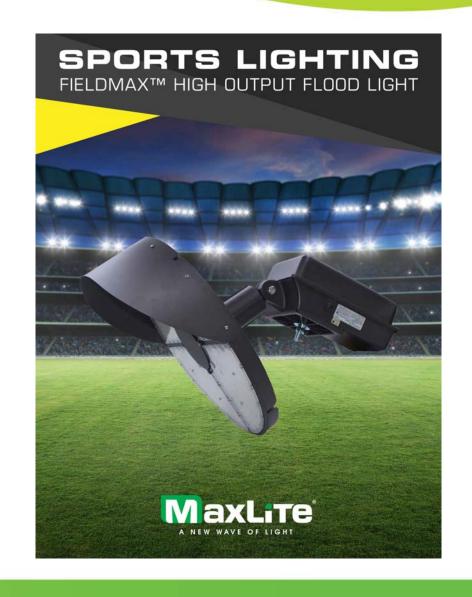
SPORTS & RECREATIONAL AREA LIGHTING

APRIL 23, 2020

ADVANTAGES OF LED IN SPORTS LIGHTING



- No restart time
- LED fixtures do not depreciate like HID fixtures
- No relamping is needed
- Less Energy is consumed with LED
- Better Light quality and light control is achieved (Spill & Glare)





POSITIONING OF MAXLITE IN SPORTS LIGHTING

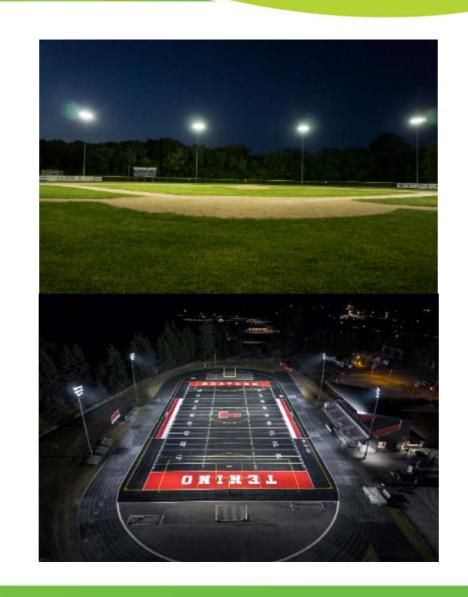


Positioning:

- Recreational Fields
- High School Fields
- Small College Playing Fields & All Purpose Fields

PROFESSIONAL STADIUMS
TELEVISED SPORTING EVENTS

Why? Performance and requirements are different





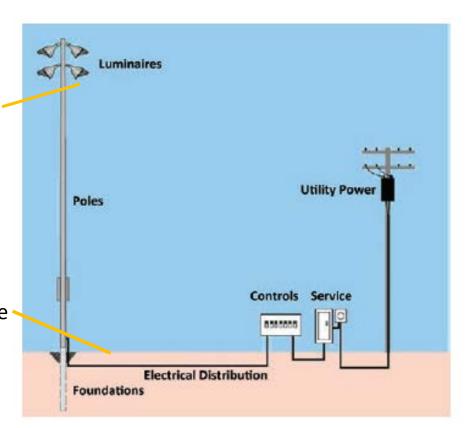
HOW IS LIGHT MEASURED IN SPORTS FIELDS?





Lumens (Im) – Out of the fixture

Footcandles (FC) – on the surface





LIGHT RECOMMENDATIONS FOR FIELDS



FACILITY				
PACILITY	1	II	III	IV
Professional	X			
College	X	X		
Semi-Professional	X	X		
Sports Clubs	X	X	X	
Amateaur Leagues		Х	X	X
High School		X	X	X
Training Facilities			X	X
Elementary School				X
Receational Event				X
Social Event				X

Class I: Facilities with spectator capacity over 5,000
Class II: Facilities with spectator capacity under 5,000
Class III: Facilities with some provision for spectators

Class IV: Facilities with limited or no provision for spectators

FC Levels Required							
Sport Type	Class IV	Class III					
Football	30	50					
Soccer	30	50					
Baseball	30/20	50/30					
Softball	30/20	50/30					
Tennis	30	50					

The illuminating engineering society (IES) has standards for Indoor, Outdoor, Sports, Roadway



WHAT IS A SPORTS LIGHTING SYSTEM?



A complete sports lighting system includes:

1. Luminaires

- Integral Driver or
- Remote driver & Enclosure

2. Pole structure

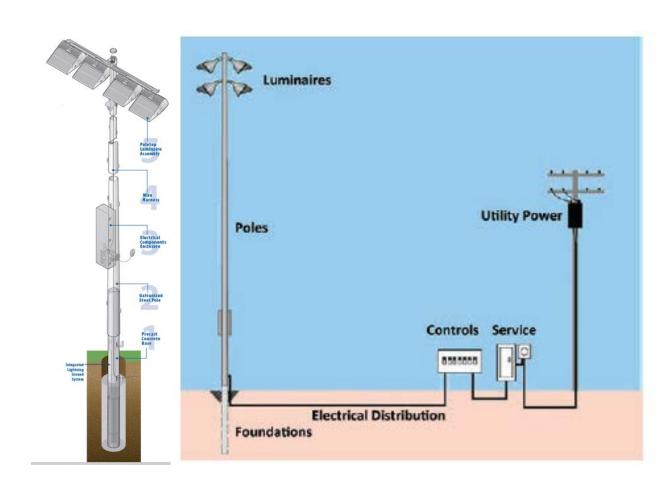
- Crossarm
- Pole shaft & Base

3. Wiring

- Crossarm Harness
- Pole Harness

4. Control System

Electrical distribution & Cables (By others)



Outdoor lighting system shown

* Indoor lighting system does not include the pole shaft & base



SPORTS LIGHTING WITH MAXLITE



1. Quoting process

- Lighting Layout 2 days
- Fixtures quote 1 day
- Pole system (Crossarm , Pole) 5 days
- Control system 5 days
- Help research potential utility rebates to help the ROI

2. Deliverables / Lead times

- Installation aiming diagram
- Stamped structural drawing
- 2 3 weeks domestic stock for 1-2 fields projects
- Large quantities / projects could range from 6-10 weeks
- 6 12 weeks pole system delivery





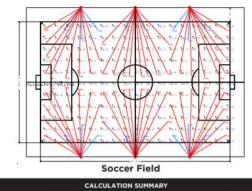
LIGHTING LAYOUTS

MaxLite

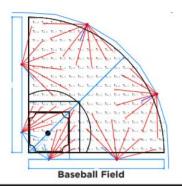
- Use our typical layouts to quote or
- Reach out to MaxLite for a specific layout
 - with field information
 - * poles locations and heights
 - * field location and dimension
 - Clarify targets
 - * Specifying Light levels instead of fixture count is always better
 - * If doing a fixture to fixture replacement, it might be important to use "2" wattages options and compare.

LEAD TIME - 2 DAYS

TYPICAL LAYOUT

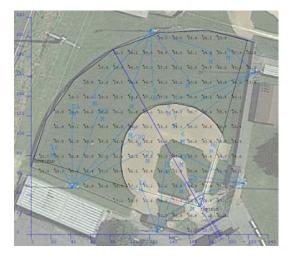


CALCULATION SUMMARY									
LABEL	CALC TYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	# PTS	
SOCCER FIELD	Illuminance	Fc	57.73	73.4	40.9	1.41	1.79	50	



CALCULATION SUMMARY									
LABEL	CALC TYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	# PTS	
ASEBALL FIELD	Illuminance	Fc	36.64	67.0	20.4	1.80	3.28	179	
INFIELD	Illuminance	Fc	51.31	67.0	34,3	1.50	1.95	36	
OUTFIELD	Illuminance	Fc	32.95	493	20.4	1.62	2.41	143	

CUSTOM LAYOUT & COMPARING 2 SOLUTIONS



INFIELD OUTFIELD

SOLUTION 1	SOLUTION 2
515W (qty 23)	430W (qty 23)
46FC	40FC
38FC	30FC

MaxLite Recommendation - Solution 2



LUMINAIRE QUOTES



Distributions: 3X3 (Wide), 5X5 (Medium),
 7X7 (Narrow)

• Features: Aiming angle indicator; 10kV standard

• **CCTs:** 4000K, 5000k

• **Options**: Yoke bracket, Visor, 347-480V

• Listings: DLC Premium; IK08; IP65; 1.5G

 Mounting options: Yoke Bracket, Threaded bolt (ø5/8"x1.75")

LEAD TIME - 1 DAY

We will help you find the applicable rebates



FieldMax

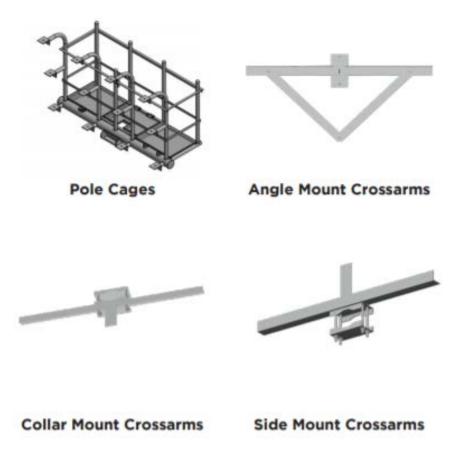
360W 430W 515W 65,000 lm 76,440 lm 90,850 lm

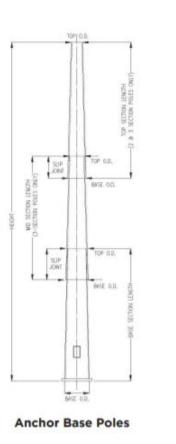




POLE SYSTEM

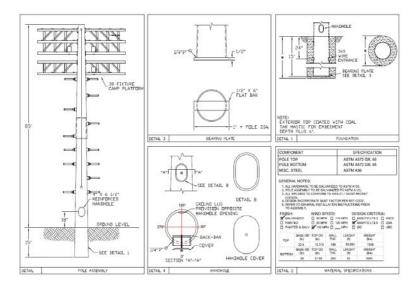






TOP: O.D. 9.)P JONT BASE O.D. WETE CONTING-

Embedded Poles



Stamped structural drawing

LEAD TIME - 5 DAYS

EPA and weight restrictions are taken into account based on the region or wind speed



CONTROLS SYSTEM

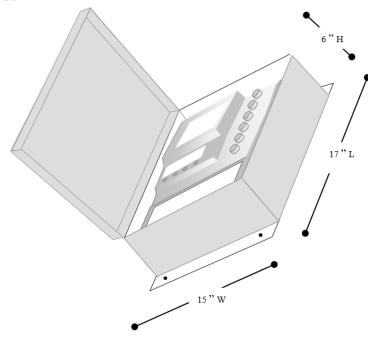


Recommended SKYLOGIX control system

- **Remote** control unit
- Website scheduling
- Monitoring of all fixtures Performance
- Manual Off-Auto-On selector switching per zone
- We can put you in contact with <u>Skylogix</u> if needed as this is sold separately from MaxLite.

LEAD TIME - 5 DAYS







INSTALLATION AIMING DIAGRAM



Lumina	ire Location Summary					
LumNo	Label	X	Y	Z	Orient	Tilt
1	430-55	121.142	206.456	40	308.188	55
2	430-55	121.142	206.456	40	272.151	55
3	430-55	121.142	206.456	40	340.956	57.214
4	430-55	121.142	206.456	40	251.966	60
5	430-55	121.142	206.456	40	226.975	65
6	430-55	226.938	164.482	40	218.133	67.349
7	430-55	226.938	164.482	40	207.188	66.82
8	430-55	226.938	164.482	40	198.924	67.046
9	430-55	226.938	164.482	40	138.544	44.244
10	430-55	215.245	51.754	40	128.468	54.417
11	430-55	215.245	51.754	40	155.041	60.864
12	430-55	215.245	51.754	40	192.724	49.982
13	430-55	215.245	51.754	40	171.393	54.509
14	430-55	127.536	3.22	40	66.523	54.509
15	430-55	127.536	3.22	40	45.192	49.982
16	430-55	127.536	3.22	40	109.448	54.417
17	430-55	127.536	3.22	40	82.875	60.864
18	430-55	41.356	47.557	40	116.409	50.893
19	430-55	41.356	47.557	40	48.35	65
20	430-55	41.356	47.557	40	39.491	65
21	430-55	41.356	47.557	40	89.948	65
22	430-55	41.356	47.557	40	70.514	65
23	430-55	41.356	47.557	40	27.023	64.484



This is available with every layout



SPORTS LIGHTING SUPPORT DOCUMENTATION



- MaxLite Submittal Package Template
 - Easy-to-follow packet includes all MaxLite documents and quote for customer review



- <u>FIELDMAX Brochure</u>
- MaxLite Sports Lighting video



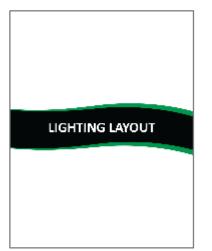




SPORTS LIGHTING SUPPORT DOCUMENTATION



Maxlite submittal package will include:



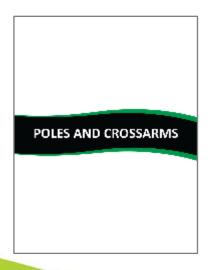


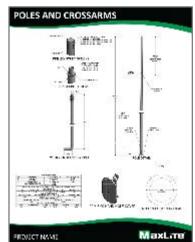


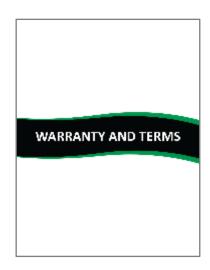














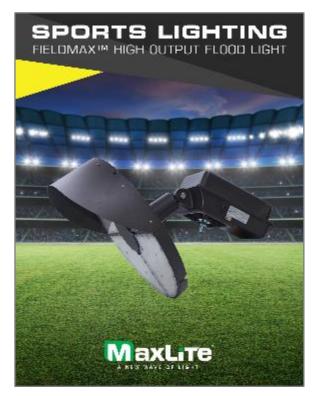




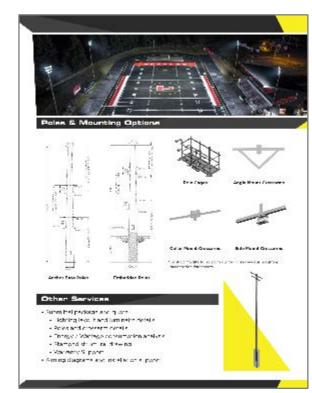
SPORTS LIGHTING SUPPORT DOCUMENTATION

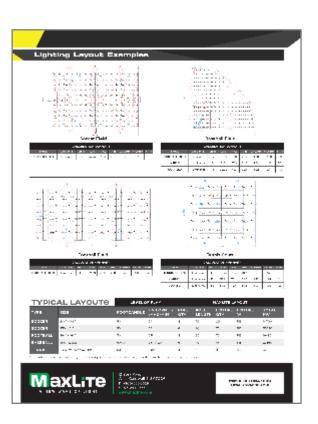


Brochure:



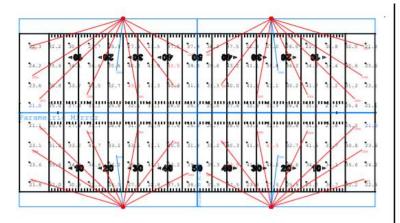






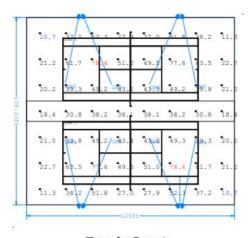
TYPICAL LAYOUTS EXAMPLES





Football Field

CALCULATION SUMMARY								
LABEL	CALC TYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	# PTS
FOOTBALL FIELD	Illuminance	Fc	32.09	43.5	21.0	1.53	2.07	144



Tennis Court

CALCULATION SUMMARY										
LABEL	CALC TYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	# PTS		
TENNIS COURTS	Illuminance	Fc	39.74	78.4	10.7	3.71	7.33	56		
COURT 1	Illuminance	Fc	53.81	78.4	39.3	1.37	1.99	12		
COURT 2	Illuminance	Fc	53.83	78.4	39.3	1.37	1.99	12		

TYPIC	AL LAYOUTS	LEVEL C	MAXLITE LAYOUT					
TYPE	SIZE	FOOTCANDLE	UNIFORMITY (MAX/MIN)	POLE QTY	POLE LENGTH	FIXTURE QTY	FIXTURE W	TOTAL KW
SOCCER	200' x 100'	50	2:1	4	70	20	515	10300
SOCCER	330' x 210'	50	2:1	6	70	72	515	37080
FOOTBALL	360' X 160'	30	2.5:1	4	60	32	515	16480
BASEBALL	300' Radius	50/30	2.5:1 / 2.0:1	6	70	44	515	22660
TENNIS	2 Courts - Side by Side	50	2.0:1	4	30	8	435	3480

^{*}For reference only. Contact your sales rep or email applications@maxlite.com for custom layouts request.



SUPPORT PRODUCT - MPULSE HIGH OUTPUT FLOOD



Distributions: Narrow, Medium, Wide, Rectangular

Features: 10kV standard; 10 Year warranty

CCTs: 4000K, 5000k

Options: 3 or 7 pin PCR, 347-480V

Listings: DLC Premium; IP66

Mounting options: Trunnion, Slipfitter



MPulse High Output Flood

220W | 440W | 660W 26,000 lm - 80,000 lm



IN STOCK NOW!!!!



SUPPORT PRODUCTS – FLOODS



MPulse™ Small/Medium Flood

100W 130W 3,500 lm 6,900 lm 12,000 lm 15,500 lm

Datasheet | Product













FloodMax Flood Lights

2,500 lm 3,700 lm 7,400 lm 10,600 lm

120W 200W 310W 15,300 lm 31,100 lm 41,600 lm

Datasheet | Product













Small Floods

40W 50W 15W 1,555 lm 2,315 lm 4,715 lm 5,880 lm

Datasheet | Product













CONTRACTOR



SUPPORT PRODUCTS – AREA



QuadroMax Plus

50W 100W 150W 200W 5,900 lm | 12,275 lm | 18,135 lm | 23,340 lm

> 250W 300W 33,485 lm 39,505 lm

Datasheet | Product | Video





















Mpulse™ Area Light

100W 200W 250W 300W 12,550 lm | 20,380 lm | 25,810 lm | 33,355 lm | 38,425 lm

Datasheet | Product



















Slim Shoebox

60W 140W 210W 100W 280W 7,900 lm | 12,355 lm | 17,250 lm | 25,810 lm | 34,370 lm

Datasheet | Product





















SUPPORT PRODUCTS – POLES & ACCESSORIES



We deliver at your door – No surprise freight charge!





BAA Steel Poles

Square Round H: 15'-30' W: 4" 5" H: 8'-30' W: 3" 4" 5"





BAA Aluminum Poles

Square Round H: 12'-25' W: 4" 5" H: 12'-20' W: 5"

- Poles ship within 2 to 4 weeks
- Poles are drilled to MaxLite Patterns, available as Tenon Top and in different finishes.
- Anchor bolts can be pre-shipped
- Freight adder predetermined for 1, 2, 3 poles
- Mounting accessories available







SPORTS & RECREATIONAL AREA LIGHTING:



THANKS FOR ATTENDING!

QUESTIONS/ANSWERS

Thank you everyone for your attention! Please feel free to use this opportunity to ask any questions you may have about MaxLite or the products shown in this presentation.

FOR MORE INFORMATION ABOUT OTHER MAXLITE PRODUCTS, OR FOR LIGHTING QUESTIONS IN GENERAL; PLEASE CONTACT:

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