## **Oriole Park**

Margate,FL

## **Lighting System**

	e Summary					
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2	60'	60'	3	TLC-LED-1200	3.51 kW	Α
		16'	1	TLC-BT-575	0.58 kW	Α
B1	60'	60'	6	TLC-LED-1200	7.02 kW	Α
		60'	1	TLC-LED-1500	1.41 kW	Α
		16'	1	TLC-BT-575	0.58 kW	Α
		60'	2	TLC-LED-550	1.08 kW	Α
B2	60'	60'	4	TLC-LED-1200	4.68 kW	Α
		60'	1	TLC-LED-1500	1.41 kW	Α
		60'	1	TLC-LED-550	0.54 kW	Α
		60'	1	TLC-LED-900	0.89 kW	Α
		16'	1	TLC-BT-575	0.58 kW	Α
C1-C2	60'	60'	5	TLC-LED-1200	5.85 kW	Α
		16'	2	TLC-BT-575	1.15 kW	Α
C3	60'	60'	2	TLC-LED-1200	2.34 kW	Α
		60'	1	TLC-LED-550	0.54 kW	Α
		16'	1	TLC-BT-575	0.58 kW	Α
P1	40'	40'	1	TLC-LED-1200	1.17 kW	В
		40'	1	TLC-LED-550	0.54 kW	В
P2-P3	50'	50'	2	TLC-LED-550	1.08 kW	С
P4-P5	60'	60'	3	TLC-LED-550	1.62 kW	D
12			56		50.92 kW	

Circuit Summ	ary		
Circuit	Description	Load	Fixture Qty
Α	Baseball	43.81 kW	44
В	Batting Cage	1.71 kW	2
С	Staging Area	2.16 kW	4
D	Playground	3.24 kW	6

Fixture Type Summary							
Туре	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	29
TLC-LED-550	LED 5700K - 75 CRI	540W	67,000	>120,000	>120,000	>120,000	15
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	1
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	9
TLC-LED-1500	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000	>120,000	2

Single Luminaire Amperage Draw Chart										
Driver (.90 min power factor)	Max Line Amperage Per Luminaire						re			
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)			
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0			
TLC-LED-550	3.2	3.0	2.8	2.4	1.9	-	1.4			
TLC-LED-900	5.3	5.0	4.6	4.0	3.2	2.9	2.3			
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5			
TLC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6			

## **Light Level Summary**

	Calculation Grid Summary								
ı	Grid Name	Calculation Metric			Illumination			Circuits	Fixture Qty
П	5115 115115		Ave Min Max		Max	Max/Min	Ave/Min		
ı	Baseball (Infield)	Horizontal Illuminance	50.1	33.4	60.1	1.80	1.50	Α	44
	Baseball (Outfield)	Horizontal Illuminance	32	22.5	49.1	2.18	1.42	Α	44
	Batting Cage	Horizontal Illuminance	31.9	21.7	44.4	2.05	1.47	В	2
	Playground	Horizontal Illuminance	6.40	3.70	10.6	2.86	1.73	D	6
	Staging Area	Horizontal Illuminance	5.44	1	9.40	9.55	5.44	С	4
	Warm-up Left Field	Horizontal Illuminance	32.7	27.9	42.8	1.53	1.17	Α	44
	Warm-up Right Field	Horizontal Illuminance	30.4	22.2	39.8	1.79	1.37	Α	44

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## From Hometown to Professional











#### LOCATION SIZE TLC-LED-1200 TLC-LED-1500 B1 TLC-LED-550 15.5' TLC-BT-575 TLC-LED-1200 TLC-LED-1200 B2 60' 60' TLC-LED-900 60' TLC-LED-1500 15.5' TLC-BT-575 TLC-LED-550 C1-C2 TLC-BT-575 15.5' 60' TLC-LED-1200 C3 60' TLC-LED-550 60' 15.5' TLC-BT-575 TLC-LED-1200 \* This structure utilizes a back-to-back mounting configuration 23 127 C1 34 34 33 34 30 36 36 38 32 37 27 38 33 29 23 44 35 32 31 28 27 $\otimes$ 45 41 36 31 28 27 29 31 31 28 28 30 36 38 35 30 29 32 57 43 37 25 56 53 40 32 27 26 25 28 28 51 47 31 28 26 25 28 59 54 27 \_50 48 33 43 35 25 31 SCALE IN FEET 1:60

**EQUIPMENT LIST FOR AREAS SHOWN** 

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## **Oriole Park**

Margate,FL

**GRID SUMMARY** Name: Baseball Size: Irregular 324' / 318' / 328' Spacing: 30.0' x 30.0' Height: 3.0' above grade

ILLUMINATION S	ILLUMINATION SUMMARY							
MAINTAINED HORIZONTA	L FOOTCANDL	ES						
	Infield	Outfield						
Guaranteed Average:	50	30						
Scan Average:	50.13	31.99						
Maximum:	60.1	49.1						
Minimum:	33.4	22.5						
Avg / Min:	1.50	1.42						
Guaranteed Max / Min:	2	2.5						
Max / Min:	1.80	2.18						
UG (adjacent pts):	1.41	1.45						
CU:	0.68							
No. of Points:	25	87						
LUMINAIRE INFORMATIO	N							
Applied Circuits: No. of Luminaires:	A <b>44</b>							
Total Load:	43.8 kW							

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



to 0,0 reference point(s)  $\otimes$ 

## **EQUIPMENT LIST FOR AREAS SHOWN** LOCATION SIZE ELEVATION A1-A2 60' TLC-LED-1200 TLC-LED-1500 B1 60' TLC-LED-550 15.5' TLC-BT-575 TLC-LED-1200 TLC-LED-1200 B2 60' 60' TLC-LED-900 60' TLC-LED-1500 TLC-BT-575 15.5' TLC-LED-550 60' C1-C2 TLC-BT-575 60' 15.5' 60' TLC-LED-1200 C3 60' TLC-LED-550 60' 15.5' TLC-BT-575 60' TLC-LED-1200 This structure utilizes a back-to-back mounting configuration 28 38 39 28 26 32 29 40 24 39 38 27 22 25 26 24 22 SCALE IN FEET 1:20 to 0,0 reference point(s) $\otimes$

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**Oriole Park** 

Margate,FL

GRID SUMMARY

Name:
Size:
Spacing:
Spacing:
Height:
3.0' above grade

**ILLUMINATION SUMMARY** MAINTAINED HORIZONTAL FOOTCANDLES Entire Grid Guaranteed Average: Scan Average: 30.35 Maximum: 39.8 Minimum: 22.2 Avg / Min: 1.37 Guaranteed Max / Min: 2.5 Max / Min: 1.79 1.62 UG (adjacent pts): CU: 0.04 No. of Points: 18 LUMINAIRE INFORMATION Applied Circuits: A No. of Luminaires: 44 Total Load: 43.8 kW

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



## **EQUIPMENT LIST FOR AREAS SHOWN** LOCATION SIZE 60' TLC-LED-1200 TLC-LED-1500 TLC-LED-550 B1 60' TLC-BT-575 15.5' TLC-LED-1200 TLC-LED-1200 60' B2 60' 60' TLC-LED-900 60' TLC-LED-1500 TLC-BT-575 15.5' TLC-LED-550 C1-C2 60' 15.5' 60' TLC-BT-575 TLC-LED-1200 TLC-LED-550 TLC-BT-575 C3 60' 60' 15.5' 60' TLC-LED-1200 his structure utilizes a back-to-back mounting configuration 28 29 35 36 29 40 28 32 33 32 29 32 SCALE IN FEET 1:30 Pole location(s) $\oplus$ dimensions are relative

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**Oriole Park** 

Margate,FL

GRID SUMMARY

Name:
Size:
Spacing:
Congretation of the state of the st

ILLUMINATION S	ILLUMINATION SUMMARY					
MAINTAINED HORIZONTA	AL FOOTCANDLES					
	Entire Grid					
Guaranteed Average:	30					
Scan Average:	32.73					
Maximum:	42.8					
Minimum:	27.9					
Avg / Min:	1.17					
Guaranteed Max / Min:	2.5					
Max / Min:	1.53					
UG (adjacent pts):	1.53					
CU:	0.03					
No. of Points:	14					
LUMINAIRE INFORMATIO	N					
Applied Circuits:	A					
No. of Luminaires:	44					
Total Load:	43.8 kW					

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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to 0,0 reference point(s)  $\otimes$ 

EQUIPMENT LIST FOR AREAS SHOWN									
Pole Lumi									
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE Type	QTY / POLE	THIS GRID	OTHER GRIDS	
1	P1	40'	-	40'	TLC-LED-550	1	1	0	
				40'	TLC-LED-1200	1	1	0	
1	TOTALS						2	0	

## 22 29 34 35 35 33 43 33 35 34 29 SCALE IN FEET 1:20 Pole location(s) $\oplus$ dimensions are relative

## **Oriole Park**

## Margate,FL

**GRID SUMMARY** Name: Batting Cage Size: 15' x 75' Spacing: 10.0' x 10.0' Height: 3.0' above grade

#### **ILLUMINATION SUMMARY** Guaranteed Average: Scan Average: 31.87 Maximum: 44.4 Minimum: 21.7 Avg / Min: 1.47 Guaranteed Max / Min: 2.5 Max / Min: 2.05 UG (adjacent pts): 1.35 CU: 0.34 No. of Points: 16 LUMINAIRE INFORMATION Applied Circuits: B No. of Luminaires: 2 Total Load: 1.71 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

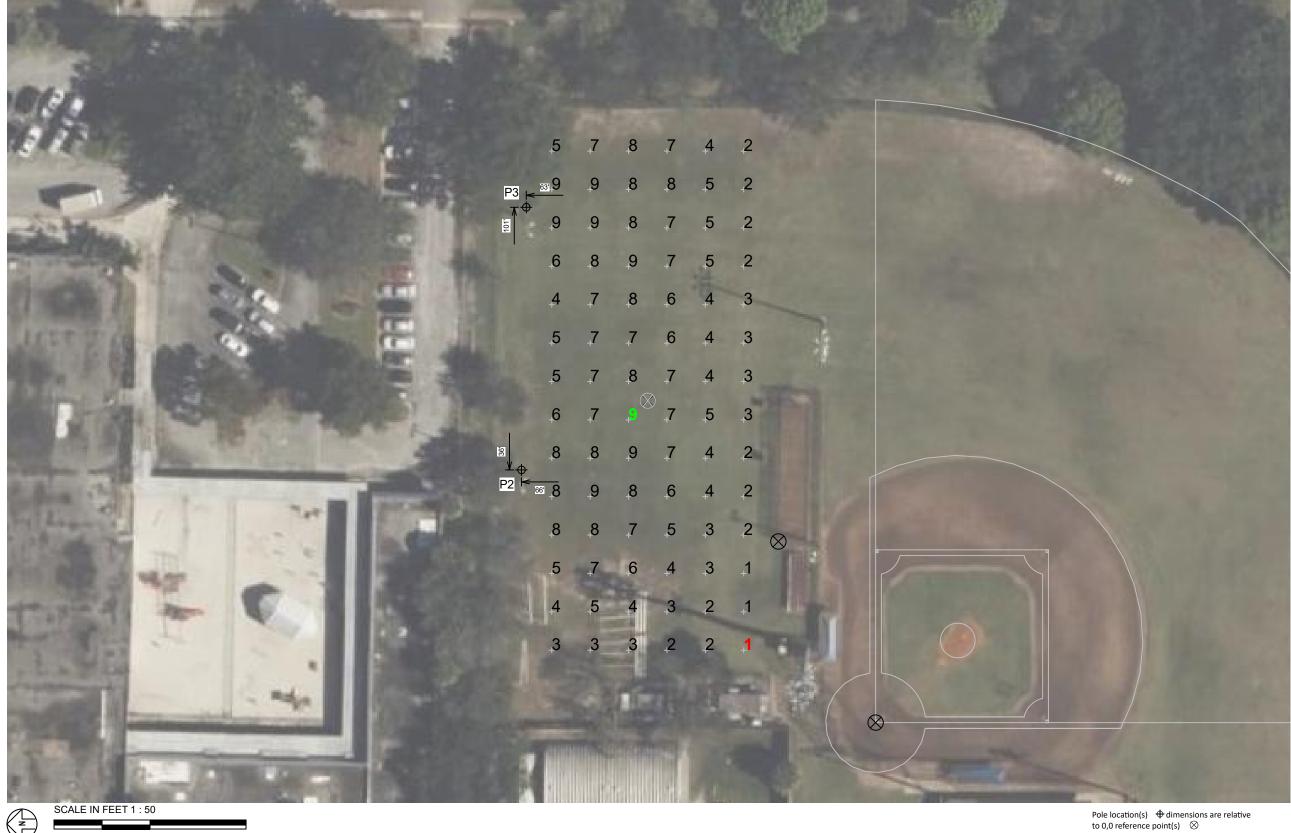
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



to 0,0 reference point(s)  $\otimes$ 

EQI	EQUIPMENT LIST FOR AREAS SHOWN									
Pole Luminai										
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE Type	QTY / POLE	THIS GRID	OTHER GRIDS		
2	P2-P3	50'	-	50'	TLC-LED-550	2	2	0		
2	2 TOTALS						4	0		



## **Oriole Park**

## Margate,FL

**GRID SUMMARY** Name: Staging Area Size: 110' x 280' Spacing: 20.0' x 20.0' Height: 3.0' above grade

#### **ILLUMINATION SUMMARY Guaranteed Average:** Scan Average: 5.44 Maximum: 9.4 Minimum: 1.0 Avg / Min: 5.50 Max / Min: 9.55 UG (adjacent pts): 2.02 CU: 0.74 No. of Points: 84 LUMINAIRE INFORMATION Applied Circuits: C No. of Luminaires: 4 Total Load: 2.16 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



EQI	EQUIPMENT LIST FOR AREAS SHOWN									
	P	ole		Luminaires						
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE Type	QTY / POLE	THIS GRID	OTHER GRIDS		
2	P4-P5	60'	-	60'	TLC-LED-550	3	3	0		
2	2 TOTALS						6	0		

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## **Oriole Park**

## Margate,FL

GRID SUMMARY

Name:
Size: 180' x 220'
Spacing: 20.0' x 20.0'
Height: 3.0' above grade

ILLUMINATION S	ILLUMINATION SUMMARY					
MAINTAINED HORIZONTA	AL FOOTCANDLES					
	Entire Grid					
Guaranteed Average:	5					
Scan Average:	6.40					
Maximum:	10.6					
Minimum:	3.7					
Avg / Min:	1.72					
Max / Min:	2.86					
UG (adjacent pts):	1.72					
CU:	0.65					
No. of Points:	99					
LUMINAIRE INFORMATIO	N .					
Applied Circuits:	D					
No. of Luminaires:	6					
Total Load:	3.24 kW					

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



# C1 B1 C2 ⊗ Staging Area P1 **Batting Cage** C3 B2 ⊗ <sub>Playground</sub> 180' x 220' CONTRACTOR OF THE PARTY OF THE

## **Oriole Park**

Margate,FL

## **EQUIPMENT LAYOUT**

## INCLUDES: Baseball

- · Batting Cage
- · Playground · Staging Area

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary"

for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQ	UIPMEI	NT LIST	FOR AR	EAS SHO	OWN			
		Pole		Luminaires				
QTY	LOCATION	CLASS	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE Type	QTY / POLE		
2	A1-A2		-	15.5'	TLC-BT-575	1		
				60'	TLC-LED-1200	3		
1	B1		-	60'	TLC-LED-1500	1		
				60'	TLC-LED-550	2*		
				15.5'	TLC-BT-575	1		
				60'	TLC-LED-1200	5/1*		
1	B2		-	60'	TLC-LED-1200	4		
				60'	TLC-LED-900	1		
				60'	TLC-LED-1500	1		
				15.5'	TLC-BT-575	1		
				60'	TLC-LED-550	1		
2	C1-C2		-	15.5'	TLC-BT-575	2		
				60'	TLC-LED-1200	5		
1	C3		-	60'	TLC-LED-550	1		
				15.5'	TLC-BT-575	1		
				60'	TLC-LED-1200	2		
1	P1		-	40'	TLC-LED-550	1		
				40'	TLC-LED-1200	1		
2	P2-P3		-	50'	TLC-LED-550	2		
2	P4-P5		-	60'	TLC-LED-550	3		
12			TOTAL	S		56		

\* This structure utilizes a back-to-back mounting configuration

	SINGLE LUMINAIRE AMPERAGE DRAW CHART						
Line Amperage Per Luminaire (max draw)							
208	220	240 (60)	277 (60)	347 (60)	380	480 (60)	
6.9	6.5	6.0	5.2	4.2	3.8	3.0	
3.2	3.0	2.8	2.4	1.9	-	1.4	
5.3	5.0	4.6	4.0	3.2	2.9	2.3	
3.4	3.2	2.9	2.5	2.0	1.8	1.5	
8.4	7.9	7.3	6.3	5.0	4.6	3.6	
	208 (60) 6.9 3.2 5.3 3.4	208 220 (60) (60) 6.9 6.5 3.2 3.0 5.3 5.0 3.4 3.2	208 220 240 (60) (60) 6.9 6.5 6.0 3.2 3.0 2.8 5.3 5.0 4.6 3.4 3.2 2.9	208 220 240 277 (60) (60) (60) (60) 6.9 6.5 6.0 5.2 3.2 3.0 2.8 2.4 5.3 5.0 4.6 4.0 3.4 3.2 2.9 2.5	208 220 240 277 347 (60) (60) (60) (60) (60) (50) (50) (50) (50) (50) (50) (50) (5	(max draw)           208         220         240         277         347         380           (60)         (60)         (60)         (60)         (60)         (60)           6.9         6.5         6.0         5.2         4.2         3.8           3.2         3.0         2.8         2.4         1.9         -           5.3         5.0         4.6         4.0         3.2         2.9           3.4         3.2         2.9         2.5         2.0         1.8	



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Pole location(s)  $\bigoplus$  dimensions are relative to 0,0 reference point(s)  $\bigotimes$