Cartersville Sports Complex SB BB

Cartersville,GA

Lighting System

ole / Fixtur	e Summary					
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1	70'	70'	2	TLC-LED-1200	2.34 kW	Α
		70'	2	TLC-LED-1200	2.34 kW	В
		70'	1	TLC-LED-900	0.88 kW	Α
		70'	1	TLC-LED-900	0.88 kW	В
		16'	1	TLC-BT-575	0.58 kW	Α
		16'	1	TLC-BT-575	0.58 kW	В
A2	60'	60'	3	TLC-LED-900	2.64 kW	Α
		16'	1	TLC-BT-575	0.58 kW	Α
A3	60'	60'	3	TLC-LED-900	2.64 kW	В
		16'	1	TLC-BT-575		
B1	80'	80'	1	TLC-LED-1200	1.17 kW	Α
		80'	4	TLC-LED-1500	5.64 kW	В
		80'	3	TLC-LED-1500	4.23 kW	Α
		16'	2	TLC-BT-575	1.15 kW	Α
		16'	2	TLC-BT-575	1.15 kW	В
B2	70'	70'	1	TLC-LED-1200	1.17 kW	Α
		70'	2	TLC-LED-1500	2.82 kW	Α
		70'	1	TLC-LED-900	0.88 kW	Α
		16'	2	TLC-BT-575	1.15 kW	Α
B3	70'	70'	2	TLC-LED-1200	2.34 kW	В
		70'	1	TLC-LED-1500	1.41 kW	В
		70'	2	TLC-LED-900	1.76 kW	В
		16'	2	TLC-BT-575	1.15 kW	В
6			41		40.04 kW	

Circuit Summary								
Circuit	Description	Load	Fixture Qty					
Α	Baseball 1	19.58 kW	20					
В	Baseball 2	20.46 kW	21					

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1500	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000	>120,000	10
TLC-LED-900	LED 5700K - 75 CRI	880W	104,000	>120,000	>120,000	>120,000	11
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	8
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	12

Calculation Grid Summary										
Grid Name Calculation Metric				Illumination			Circuits	Fixture Qty		
		Ave	Min	Max	Max/Min	Ave/Min				
Baseball 1 (Infield)	Horizontal Illuminance	53.1	34.4	64.8	1.89	1.54	Α	20		
Baseball 1 (Outfield)	Horizontal Illuminance	30.6	17.2	41.7	2.42	1.78	Α	20		
Baseball 2 (Infield)	Horizontal Illuminance	53.3	34.3	64.9	1.89	1.55	В	21		
Baseball 2 (Outfield)	Horizontal Illuminance	30.3	18.6	44	2.37	1.63	В	21		
Bullpen - 1st Baseline	Horizontal Illuminance	27.4	22.1	33.6	1.52	1.24	В	21		
Bullpen - 3rd Baseline	Horizontal Illuminance	26.9	21.6	30.9	1.43	1.24	В	21		
Glare (Cd) - East Prop Line	Max Candela (by Fixture)	923	0.39	2368	6014.64	2342.04	A,B	41		
Glare (Cd) - North Prop Line	Max Candela (by Fixture)	1456	1.68	6600	3932.27	867.46	A,B	41		

ı												
	Calculation Grid Summary											
ı	Grid Name	Calculation Metric		Illumination					Fixture Qty			
ı	Grid Name	Calculation Metric	Ave	Min	Max	Max/Min	Ave/Min	Circuits	I IXture Qty			
	Spill - East Prop Line	Horizontal Illuminance	0.01	0	0.04	0.00		A,B	41			
	Spill - East Prop Line	Max Vertical Illuminance Metric	0.04	0	0.10	0.00		A,B	41			
	Spill - North Prop Line	Horizontal Illuminance	0.01	0	0.08	0.00		A,B	41			
ı	Spill - North Prop Line	Max Vertical Illuminance Metric	0.04	0	0.22	0.00		A,B	41			

Single Lu	Single Luminaire Amperage Draw Chart									
Driver (.9	90 min power factor)	Max Line Amperage Per Luminaire					re			
Sing	le Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)		
TI	LC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6		
Т	LC-LED-900	5.2	4.9	4.5	3.9	3.1	2.9	2.3		
TI	LC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0		
-	TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5		

From Hometown to Professional











Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

LOCATION TLC-BT-575 1/1* 15.5' TLC-LED-1200 TLC-BT-575 2/2* A2 60' 15.5' TLC-LED-900 TLC-LED-1200 В1 80' 15.5' TLC-BT-575 2/2* 3/4* TLC-LED-1500 B2 70' TLC-LED-900 70' TLC-LED-1200 70' TLC-BT-575 15.5' TLC-LED-1500 * This structure utilizes a back-to-back mounting configuration B1 **▶** 26 24 23 34 38 31 39 38 24 18 32 39 39 35 25 21 31 35 32 28 26 22 19 34 37 32 30 27 26 27 26 21 29 33 33 28 34 33 35 32 22 49 38 37 36 38 32 35 32 33 39 37 58 57 24 26 26 SCALE IN FEET 1:40 to 0,0 reference point(s) \otimes

EQUIPMENT LIST FOR AREAS SHOWN

ENGINEERED DESIGN By: D.Alexander · File #209062B · 09-Mar-23

Cartersville Sports Complex SB BB

Cartersville,GA

GRID SUMMARY Name: Baseball 1 Size: 200'/200'/200' - basepath 60' Spacing: 20.0' x 20.0' Height: 3.0' above grade

ILLUMINATION SUMMARY							
MAINTAINED HORIZONTAL FOOTCANDLES							
	Infield	Outfield					
Guaranteed Average:	50	30					
Scan Average:	53.08	30.57					
Maximum:	64.8	41.7					
Minimum:	34.4	17.2					
Avg / Min:	1.54	1.78					
Guaranteed Max / Min:	2	2.5					
Max / Min:	1.89	2.42					
UG (adjacent pts):	1.35	1.56					
CU:	0.60						
No. of Points:	25	71					
LUMINAIRE INFORMATIO	N						
Applied Circuits: No. of Luminaires:	A 20						
Total Load:	19.58 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.



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

LOCATION TLC-BT-575 1/1* 15.5' TLC-LED-1200 TLC-BT-575 2/2* A3 60' 15.5' TLC-LED-900 TLC-LED-1200 В1 80' 15.5' TLC-BT-575 2/2* 3/4* TLC-LED-1500 70' TLC-LED-900 В3 70' 70' TLC-LED-1200 15.5' TLC-BT-575 TLC-LED-1500 31 21 10 * This structure utilizes a back-to-back mounting configuration 23 20 19 34 38 19 42 24 29 22 45 30 52 63 36 54 59 33 38 44 55 44114 SCALE IN FEET 1:40

EQUIPMENT LIST FOR AREAS SHOWN

ENGINEERED DESIGN By: D.Alexander · File #209062B · 09-Mar-23

Cartersville Sports Complex SB BB

Cartersville,GA

GRID SUMMARY Name: Baseball 2 Size: 200'/200'/200' - basepath 60' Spacing: 20.0' x 20.0' Height: 3.0' above grade

ILLUMINATION SUMMARY							
MAINTAINED HORIZONTAL FOOTCANDLES							
	Infield	Outfield					
Guaranteed Average:	50	30					
Scan Average:	53.33	30.34					
Maximum:	64.9	44.0					
Minimum:	34.3	18.6					
Avg / Min:	1.56	1.63					
Guaranteed Max / Min:	2	2.5					
Max / Min:	1.89	2.37					
UG (adjacent pts):	1.30	1.52					
CU:	0.58						
No. of Points:	25	71					
LUMINAIRE INFORMATIO	N						
Applied Circuits:	В						
No. of Luminaires:	21						
Total Load:	20.46 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.



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

to 0,0 reference point(s) \otimes

LOCATION TLC-BT-575 1/1* 15.5' TLC-LED-1200 TLC-BT-575 A3 60' 15.5' TLC-LED-900 TLC-LED-1200 В1 80' 2/2* 3/4* 15.5' TLC-BT-575 TLC-LED-1500 70' TLC-LED-900 В3 70' 70' TLC-LED-1200 15.5' TLC-BT-575 TLC-LED-1500 * This structure utilizes a back-to-back mounting configuration 25 22 27 23 29 24 31 32 SCALE IN FEET 1:20 Pole location(s) \oplus dimensions are relative to 0,0 reference point(s) \otimes

EQUIPMENT LIST FOR AREAS SHOWN

ENGINEERED DESIGN By: D.Alexander · File #209062B · 09-Mar-23

Cartersville Sports Complex SB BB

Cartersville,GA

Rame:
Size: 200'/200' - basepath 60'
Spacing: 10.0' x 10.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY Entire Grid Scan Average: Maximum: 33.6 Minimum: 22.1 Avg / Min: 1.24 Max / Min: UG (adjacent pts): 1.22 CU: 0.01 No. of Points: 12 LUMINAIRE INFORMATION Applied Circuits: B No. of Luminaires: 21 Total Load: 20.46 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.



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

EQUIPMENT LIST FOR AREAS SHOWN LOCATION TLC-BT-575 1/1* 15.5' TLC-LED-1200 TLC-BT-575 60' 15.5' TLC-LED-900 TLC-LED-1200 80' 80' 2/2* 3/4* 15.5' TLC-BT-575 80' TLC-LED-1500 TLC-LED-900 70' 70' TLC-LED-1200 15.5' TLC-BT-575 TLC-LED-1500 * This structure utilizes a back-to-back mounting configuration SCALE IN FEET 1:20

ENGINEERED DESIGN By: D.Alexander · File #209062B · 09-Mar-23

Cartersville Sports Complex SB BB

Cartersville,GA

GRID SUMMARY Name: Bullpen - 3rd Baseline Size: 200'/200'/200' - basepath 60' Spacing: 10.0' x 10.0' Height: 3.0' above grade

ILLUMINATION SUMMARY Scan Average: Maximum: 30.9 Minimum: 21.6 Avg / Min: 1.24 Max / Min: UG (adjacent pts): 1.37 CU: 0.01 No. of Points: 12 LUMINAIRE INFORMATION Applied Circuits: B No. of Luminaires: 21 Total Load: 20.46 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

p.01 p.00 p.00 p.01 p.02 p.03 p.04 p.03 p.02 p.01 p.00 p.00 p.00 p.00

Cartersville Sports Complex SB BB

Cartersville,GA

GRID SUMMARY

Name: Spill - North Prop Line

Spacing: 30.0' Height: 3.0' above grade

Treagner of above g

ILLUMINATION SUMMARY

Entire Grid

Scan Average: 0.0146
Maximum: 0.078
Minimum: 0.000

No. of Points: 33

Applied Circuits: A, B

No. of Luminaires: 41

Total Load: 40.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

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

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

p.00 p.00 p.00 p.00 p.00 p.00 p.00 p.01 p.03 p.05 p.08 p.12 p.17 p.08 p.11 p.09 p.06 p.03 p.02 p.01 p.00 p.00 p.00

Cartersville Sports Complex SB BB

Cartersville,GA

GRID SUMMARY

Name: Spill - North Prop Line Spacing: 30.0'

Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY

MAX VERTICAL FOOTCANDLES

Entire Grid

 Scan Average:
 0.0431

 Maximum:
 0.218

 Minimum:
 0.000

 No. of Points:
 33

Applied Circuits: A, B

No. of Luminaires: 41
Total Load: 40.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

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

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

2535 3825 3374 2430 1563 933 473 153 17 2

Cartersville Sports Complex SB BB Cartersville,GA

GRID SUMMARY

Name: Glare (Cd) - North Prop Line

Spacing: 30.0'

Height: 5.0' above grade

ILLUMINATION SUMMARY

CANDELA (PER FIXTURE) Entire Grid

Scan Average: 1455.6010 Maximum: 6599.529 Minimum: 1.678

No. of Points: LUMINAIRE INFORMATION

Applied Circuits: A, B No. of Luminaires: 41 Total Load: 40.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty

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

33

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.

We Make It Happen_®

to 0,0 reference point(s) \otimes

ENGINEERED DESIGN By: D.Alexander · File #209062B · 09-Mar-23

A PART OF THE PROPERTY OF THE 0.02

Cartersville Sports Complex SB BB

Cartersville,GA

GRID SUMMARY Name: Spill - East Prop Line

Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY

Entire Grid Scan Average: 0.0145 Maximum: 0.044

Minimum: 0.000 No. of Points: 16 LUMINAIRE INFORMATION

Applied Circuits: A, B No. of Luminaires: 41 Total Load: 40.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty

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.



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

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

APPROPRIATE PROPRIETA 0.03

SCALE IN FEET 1:80

ENGINEERED DESIGN By: D.Alexander · File #209062B · 09-Mar-23

Cartersville Sports Complex SB BB

Cartersville,GA

GRID SUMMARY

Name: Spill - East Prop Line

Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY
MAX VERTICAL FOOTCANDLES

Scan Average: 0.0362
Maximum: 0.099
Minimum: 0.000
No. of Points: 16

Applied Circuits: A, B

No. of Luminaires: 41

Total Load: 40.04 kW

LUMINAIRE INFORMATION

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document

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.



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

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

APPROPRIATE PROPRIETA 252

SCALE IN FEET 1:80

ENGINEERED DESIGN By: D.Alexander · File #209062B · 09-Mar-23

Cartersville Sports Complex SB BB

Cartersville,GA

GRID SUMMARY

CANDELA (PER FIXTURE)

Name: Glare (Cd) - East Prop Line

Spacing: 30.0'

Height: 5.0' above grade

ILLUMINATION SUMMARY

Entire Grid

Scan Average: 922.7623

Maximum: 2367.521

Minimum: 0.394

No. of Points: LUMINAIRE INFORMATION

Applied Circuits: A, B

No. of Luminaires: 41

Total Load: 40.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document

16

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.



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2023 Musco Sports Lighting, LLC.

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

Baseball 2 Baseball 1 200'/200'/200' - b<mark>as</mark>epath 60' A1 21/12 man france

ENGINEERED DESIGN By: D.Alexander · File #209062B · 09-Mar-23

Cartersville Sports Complex SB BB

Cartersville,GA

EQUIPMENT LAYOUT

INCLUDES:

· Baseball 1 Baseball 2

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.

EC	EQUIPMENT LIST FOR AREAS SHOWN										
		Pole			Luminaires						
QTY	LOCATION	CLASS	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE Type	QTY / POLE					
1	A1	LSS70B	-	70'	TLC-LED-900	1/1*					
				15.5'	TLC-BT-575	1/1*					
				70'	TLC-LED-1200	2/2*					
2	A2-A3	LSS60AA	-	15.5'	TLC-BT-575	1					
				60'	TLC-LED-900	3					
1	B1	LSS80B	-	80'	TLC-LED-1200	1					
				15.5'	TLC-BT-575	2/2*					
				80'	TLC-LED-1500	3/4*					
1	B2	LSS70A	-	70'	TLC-LED-900	1					
				70'	TLC-LED-1200	1					
				15.5'	TLC-BT-575	2					
				70'	TLC-LED-1500	2					
1	В3	LSS70A	-	70'	TLC-LED-900	2					
				70'	TLC-LED-1200	2					
				15.5'	TLC-BT-575	2					
				70'	TLC-LED-1500	1					
_			TOTAL	6		44					

6 TOTALS

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

SINGLE LUMINAIRE AMPERAGE DRAW CHART									
Driver (.90 min power factor)	Line Amperage Per Luminaire (max draw)								
Single Phase Voltage	208	220 (60)	240 (60)	277 (60)	347 (60)	380	480 (60)		
TLC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6		
TLC-LED-900	5.2	4.9	4.5	3.9	3.1	2.9	2.3		
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0		
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5		



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