

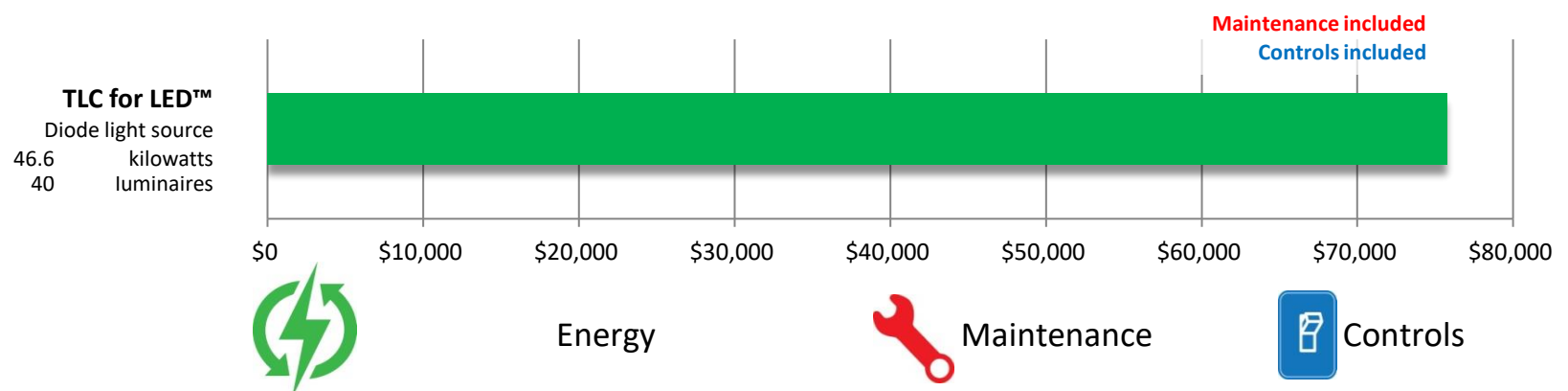
25-Year Cost of Ownership

WHS Stadium

Prepared For:

Jay McHale

August 31, 2021



How is this possible? Musco's 40 years of developing systems, light control, and application expertise puts more available lumens per watt on the field. Our services team provides all on/off operation, monitoring, and maintenance.

Assumptions	Football 50fc
Annual operating hours	100
Energy:	
Energy cost per kilowatt hour	\$0.10
Demand charge per kilowatt hour	\$11.00
Maintenance:	
Group relamp - cost per luminaire	\$266
Spot maintenance over 25 years	\$3,750
Controls:	
Labor - turning lights on & off	\$0.00
Lights on extra time without controls	15%



TLC for LED

kW totals	46.64
Energy totals	\$75,790
Maintenance	0.00
Controls	0.00
Totals	\$75,790
Qty of luminaires	40
CO2	80

Field 1

kW Totals:	46.64
TLC luminaire totals:	40

Input fields in yellow

Facility name	WHS Stadium
Scoreboard project #	197283
Field description & footcandle levels	Football 50fc
Prepared for	Jay McHale
Energy cost per kWh	\$0.10
Annual operating hours	100

Does the facility have demand charges?	No
Demand charges	11
Months of demand	5

Musco TLC for LED data		Lumen	
TLC	TLC for LED™ 1500		5,110,400
Poletop luminaire quantity	22	160,000	3,520,000
TLC	TLC for LED™ 1200		
Poletop luminaire quantity	6	136,000	816,000
TLC	TLC for LED™ 900		
Poletop luminaire quantity	4	89,600	358,400
TLC	TLC for LED™ 400		
Poletop luminaire quantity	0	46,500	-
TLC	TLC for LED™ RGBW		
Poletop luminaire quantity	0		
BallTracker™ luminaire quantity	8	52,000	416,000
kW demand per luminaire		1.43	
kW demand per luminaire		1.17	
kW demand per luminaire		0.89	
kW demand per luminaire		0.4	
kW demand per luminaire		0.64	
kW demand per BallTracker™ luminaire		0.575	
Total system kW	46.64		

Warranty duration (in years)	25
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25-year cost calculations			
	Musco TLC for LED		
Energy	\$11,660	\$	466
Demand charges	\$64,130	\$	2,565
Energy total	\$75,790	\$	3,032
Maintenance (relamping & spot)			
Controls			
Total	\$75,790	\$	3,032
25-Year CO2	80		

Luminaire Technology Information		
	kW Demand	Useful lamp hours
Musco Green Generation 1500-watt	1.564	5000
Musco Green Generation 1000-watt	1.12	12000
Metal halide 1500-watt	1.62	3000
Metal halide 1000-watt	1.08	10000
Quartz 1500-watt	1.5	2000
Quartz 1000-watt	1	2000
MPI 1000-watt	1	2000
HPS 1000-watt	1.07	24000