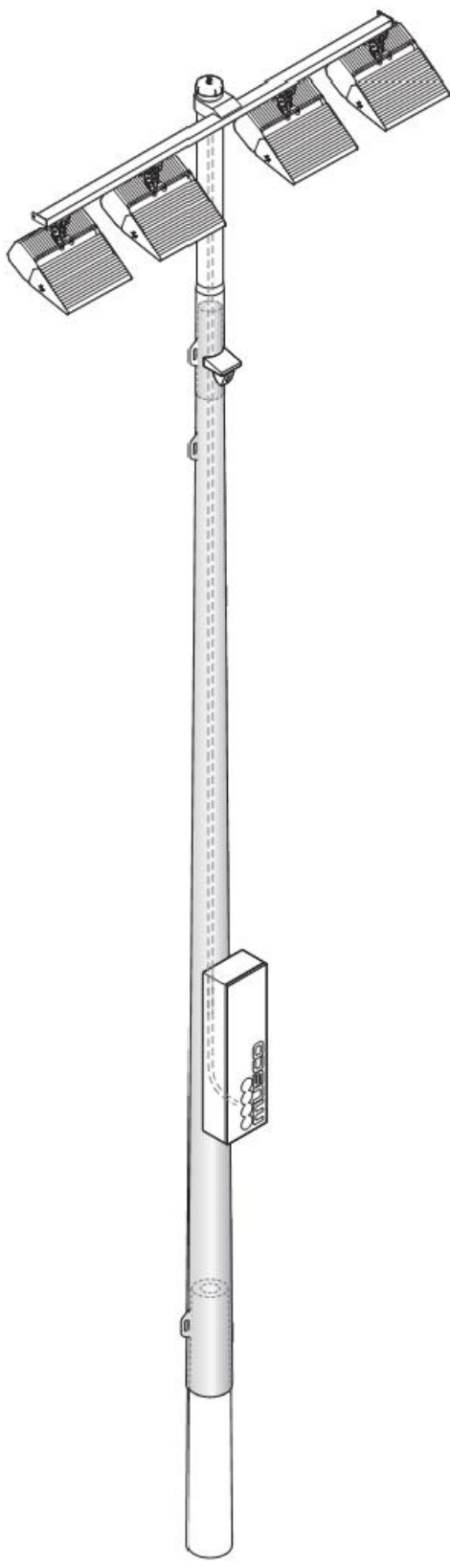


TLC for LED™ – Galvanized Steel Pole



Overview

The galvanized steel pole is designed to slip-fit together with the precast concrete base and the poletop luminaire assembly.

Features

- Slip-fit connection allows pole assembly with come-alongs
- Built-in hardware for attaching electrical components enclosure
- Wire access from inside the pole (no exposed wiring or conduit)
- Shipped in sections for easier handling
- Labeled with pole identification for location on field

Technical Specifications

Pole dimensions vary. For measurements refer to project specific pole configuration drawing.

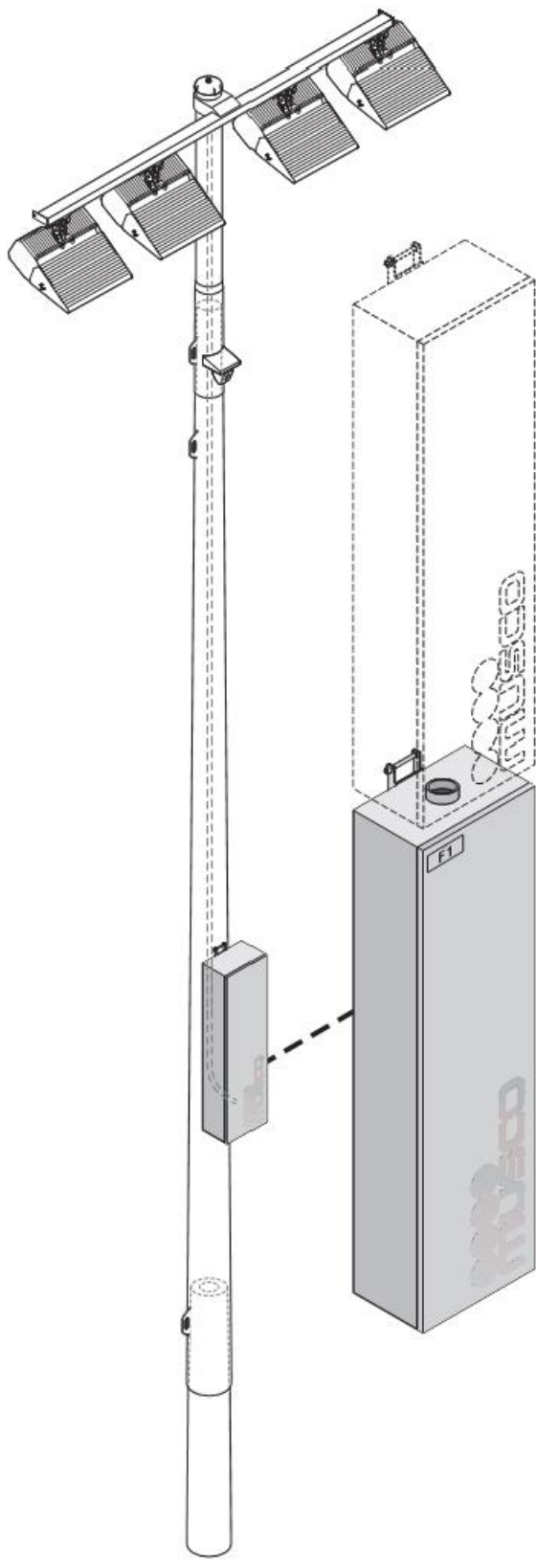
Construction

- Pole designs comply with all major building codes
- High strength, low alloy, tapered, round steel pole
- Hot dip galvanizing inside and outside after fabrication meets ASTM-A123 and EN 1461 standards
- Conforms to AASHTO stress standards and BS EN 40-3-1
- Grounding lug—rated for aluminum (AL) or copper (CU) wiring
- Pole shipped in sections
- Stainless steel fasteners passivated and coated
- Material certifications are available

Quality Assurance Tests

- Bending stress
- Minimum galvanizing thickness
- Straightness measurement

TLC for LED™ – Electrical Components Enclosure



Overview

The electrical components enclosure contains all necessary equipment to operate luminaires. Built-in mounting hardware allows for easy attachment to the galvanized steel pole. Quick connect plugs fasten to the wire harness.

Features

- Factory-built and tested as a unit
- Quick connect plug for easy field wiring
- Mounted 10 ft (3 m) above grade for servicing with ladder
- Labeled with pole identification and electrical information
- Drivers individually fused and spare fuses supplied
- Wire access from inside the pole (no exposed wiring or conduit)
- Disconnect per circuit

Technical Specifications

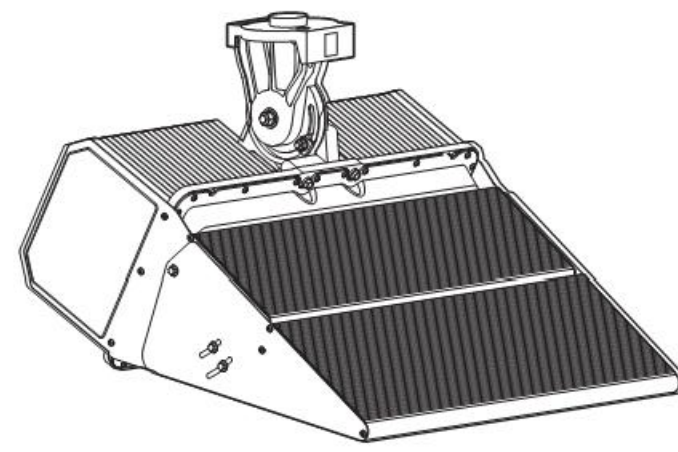
For amperage draws and circuitry refer to project specific document.

Construction

- 0.08 inch (2 mm) thick, powder-coated aluminum
- Enclosure ratings: NEMA 3R, IP54
- Designed to operate in up to 50° C (122° F) ambient temperature
- Full length stainless steel hinge
- All stainless steel fasteners passivated and coated
- Meets touchsafe standards
- Up to four drivers per enclosure
- Approximate weight 65 lb (29 kg)
- Lower enclosure size 14.25 in (362 mm) wide x 8 in (203 mm) deep x 52.5 in (1334 mm) high
- Upper enclosure size 14.25 in (362 mm) wide x 8 in (203 mm) deep x 40.5 in (1029 mm) high

Quality Assurance Tests

- Grounding continuity
- High potential dielectric withstand
- Full functionality test



Luminaire Data

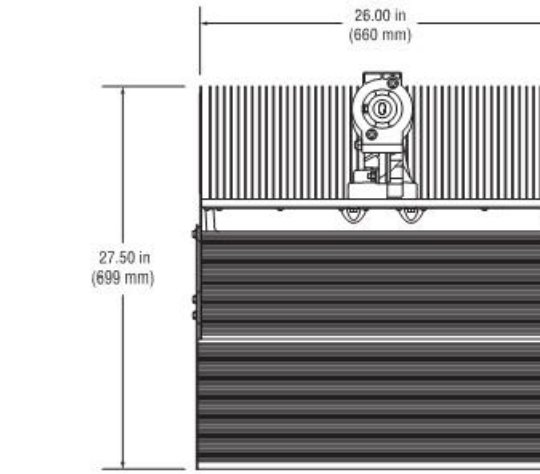
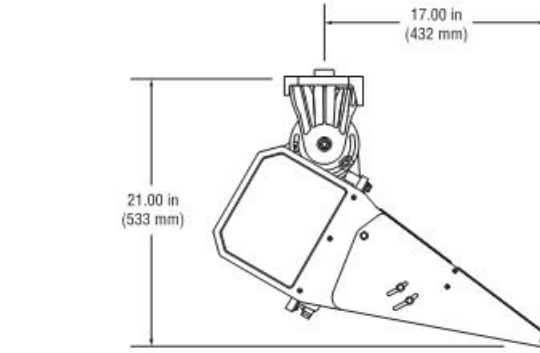
Weight (luminaire) 80 lb (36 kg)
UL listing number E338094
UL listed for USA / Canada UL1598 CSA-C22.2 No.250.0
Ingress protection, luminaire IP65
Material and finish Aluminum, powder-coat painted
Wind speed rating (aiming only) 150 mi/h (67 m/s)

Photometric Characteristics

Projected lumen maintenance per IES TM-21-11
L90(8.5k) >51,000 h
L80(8.5k) >51,000 h
L70(8.5k) >51,000 h
CIE correlated color temperature 5700 K
Color Rendering Index (CRI), typical 75
Color Rendering Index (CRI), minimum 70
Lumens¹ 121,000

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire.



Driver Data

Electrical Data

Rated wattage¹
Per driver 1,150 W
Per luminaire 1,150 W
Number of luminaires per driver 1
Starting (inrush) current <40 A, 256 µ
Fuse rating 15 A
UL ambient temperature rating, electrical components enclosure 50° C (122° F)
Ingress protection, electrical components enclosure IP54
Efficiency 95%
Dimming mode optional
Range, energy consumption 15 – 100%
Range, light output 20 – 100%

	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
Max operating current¹	7.26 A	6.98 A	6.60 A	6.31 A	6.05 A	5.24 A	4.18 A	3.82 A	3.63 A	3.50 A	3.03 A

Footnotes:

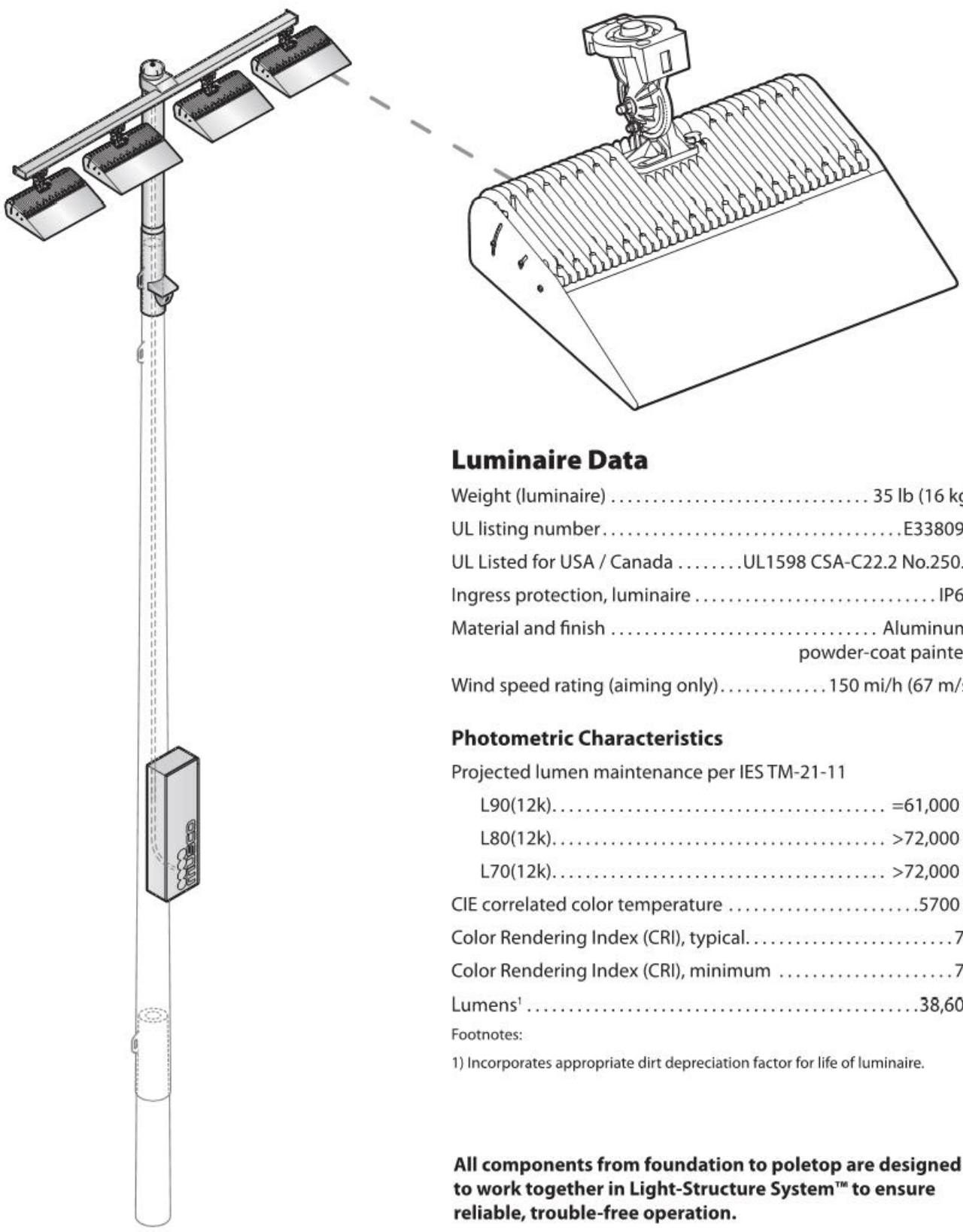
- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25° C ambient temperature environment.
- 2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See Musco Control System Summary for circuit information.

BLEACHER LIGHTING (CURTSEY)
NTS

Luminaire and Driver Components – TLC-LED-400



Luminaire Data

Weight (luminaire) 35 lb (16 kg)
UL listing number E338094
UL Listed for USA / Canada UL1598 CSA-C22.2 No.250.0
Ingress protection, luminaire IP65
Material and finish Aluminum, powder-coat painted
Wind speed rating (aiming only) 150 mi/h (67 m/s)

Photometric Characteristics

Projected lumen maintenance per IES TM-21-11
L90(12k) =61,000 h
L80(12k) >72,000 h
L70(12k) >72,000 h
CIE correlated color temperature 5700 K
Color Rendering Index (CRI), typical 75
Color Rendering Index (CRI), minimum 70
Lumens¹ 38,600

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire.

All components from foundation to poletop are designed to work together in Light-Structure System™ to ensure reliable, trouble-free operation.

Luminaire and Driver Components – TLC-LED-400

Driver Data

Electrical Data

Rated wattage¹
Per driver 800 W
Per luminaire 400 W
Number of luminaires per driver 2
Starting (inrush) current <40 A, 256 µ
Fuse rating 15 A
UL ambient temperature rating, electrical components enclosure 50° C (122° F)
Ingress protection, electrical components enclosure IP54
Efficiency 95%
Dimming mode optional
Range, energy consumption 20 – 100%
Range, light output 25 – 100%

	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
Max operating current¹	5.12 A	4.92 A	4.66 A	4.44 A	4.26 A	3.70 A	2.96 A	2.70 A	2.56 A	2.45 A	2.14 A

Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25° C ambient temperature environment.
- 2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See Musco Control System Summary for circuit information.

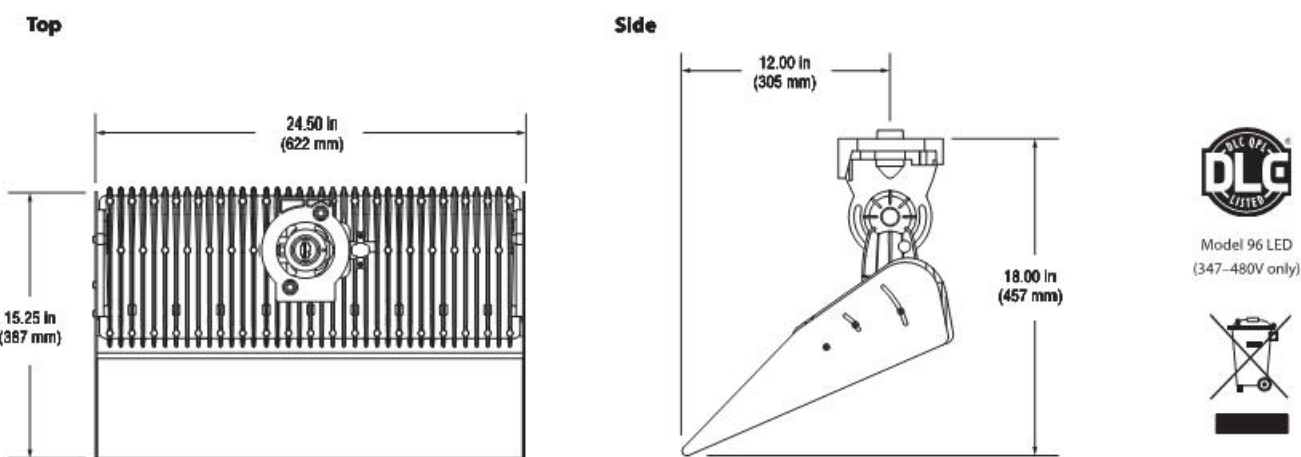


Exhibit F

FIELD LIGHTING

COPPELL MIDDLE SCHOOL EAST -
TRACK SURFACE AND FIELD TURF
REPLACEMENT - BB #47615
COPPELL, TEXAS



COPPELL ISD - BUSINESS OFFICE
31303 WRANGLER CIRCLE
COPPELL, TEXAS 75019
ATTN: SID GRANT

PROJECT ADDRESS:
COPPELL MIDDLE SCHOOL EAST
400 MOCKINGBIRD LANE
COPPELL, TEXAS 75019

Revisions:		
1	03/18/17	ADDENDUM #1
2	12/11/17	City Comments
3	01/30/18	P and Z Comments

Issue Dates:	
Review:	03-06-2017
Permit:	
Construction:	
Scale:	AS SHOWN
Drawn By:	RAH
Checked By:	CMC
Project No:	Buy Board#47615

Sheet

C7

THIS SHEET IS FOR REFERENCE ONLY