

ADDENDUM NO. 2

DATED: November 11/10/2020

TO THE DRAWINGS AND PROJECT MANUAL FOR:

PROJECT: Morningside Tennis Court Lighting
PROJECT NO. 19-0035-PR

PREPARED BY:	PARKS AND RECREATION DEPARTMENT	ADVANCE ENGINEERING & DESIGN
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	PHONE: 727-562-4856	
	FAX: 727-562-4825	

THIS ADDENDUM NO. 2 ISSUED TO CLARIFY **SUBSTITUTION OF EPHEBUS SPORT LIGHTING FOR MUSCO SPORT LIGHTING TO BIDDING DOCUMENTS FOR MORNINGSIDE TENNIS COURT LIGHTING - PROJECT NO. 19-0035-PR OF THE CONTRACT DOCUMENTS FOR THIS WORK, THIS ADDENDUM CONSTITUTES A PART OF THE CONTRACT DOCUMENTS. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE PROPOSAL FORM.**

- A. Request to review Ephesus Sport Lighting as a substitution for MUSCO see attachment submitted.**
 - a. MORNINGSIDE TENNIS – EPHEBUS SUBMITTAL FOR PREAPPROVAL (1 page)
 - b. Florida Feature Products (1 page)
 - c. Ephesus Sport Lighting – material submittal. (15 pages)
- 1. Ephesus Sport Lighting is non-responsive - based on checklist Ephesus Sport Lighting is not an acceptable substitution.**
- 2. Page 7 of the Specifications provides a checklist for manufacturers wanting to be approved.
- 3. Several areas of non-compliance
 - a. Item C – On field lighting design
 - b. Pole heights are 50'. This is to control the glare on the surrounding properties. The project was designed to protect the neighbors from spill AND glare
 - c. Light design required by the City of Clearwater is 30fc minimum grid point. The attached designs are 30fc average with multiple grid points being less than 30fc
 - d. Item D. - No Glare candela scans were submitted (Spill scans are not the same).
 - e. Item E. – No photometric report was submitted. The photometric report shows the amount of glare in the upper portion of the beam.
 - f. Per section 1.3, A – No external visors to control glare are supplied
 - g. Per section 1.3, B – First page of the photometric report was not provided
 - h. Per section 1.3, C – No documentation was provided showing that the fixture proposed limits candela in the upper portion of the beam to 10,000 candela at 15 degrees above vertical
 - i. Item I – No information on controls as specified in section
 - j. Item K – Warranty is for 10 years.
 - k. No information who will do the warranty. NGU only in business for a few years and they are not a manufacturer
 - l. No information on specifically funded reserves for the warranty
 - m. No information on who will be performing the labor portion of the warranty and where the manufacturer has technicians within 60 miles (section 3.4)
 - n. The manufacturer's warranty is 10 years parts – who is proposed to cover labor and who would cover parts and labor for 25 years.
 - o. Item L – References where these specific fixtures are installed. These references are for various Ephesus fixtures. Verify which (if any) are using the Lumasport as this is a new fixture.
 - p. Item M – Product information
 - q. Drivers are located at the top of the pole, not at 15' above grade as specified in section 2.1, D – 4
 - r. Surge provided is 10kV – far short of the 40kA required in section 2.1, D – 5
 - s. There is no information on the fixtures ability to withstand 150mph winds as specified in 2.1, D – 7
 - t. No information on controls and monitoring as required in the specification
 - u. SO cords are used to power the fixtures. Internal wiring is specified.

End of Addendum No. 2

MORNINGSIDE TENNIS – EPHEBUS SUBMITTAL FOR PREAPPROVAL

11/5/2020

NOTES:

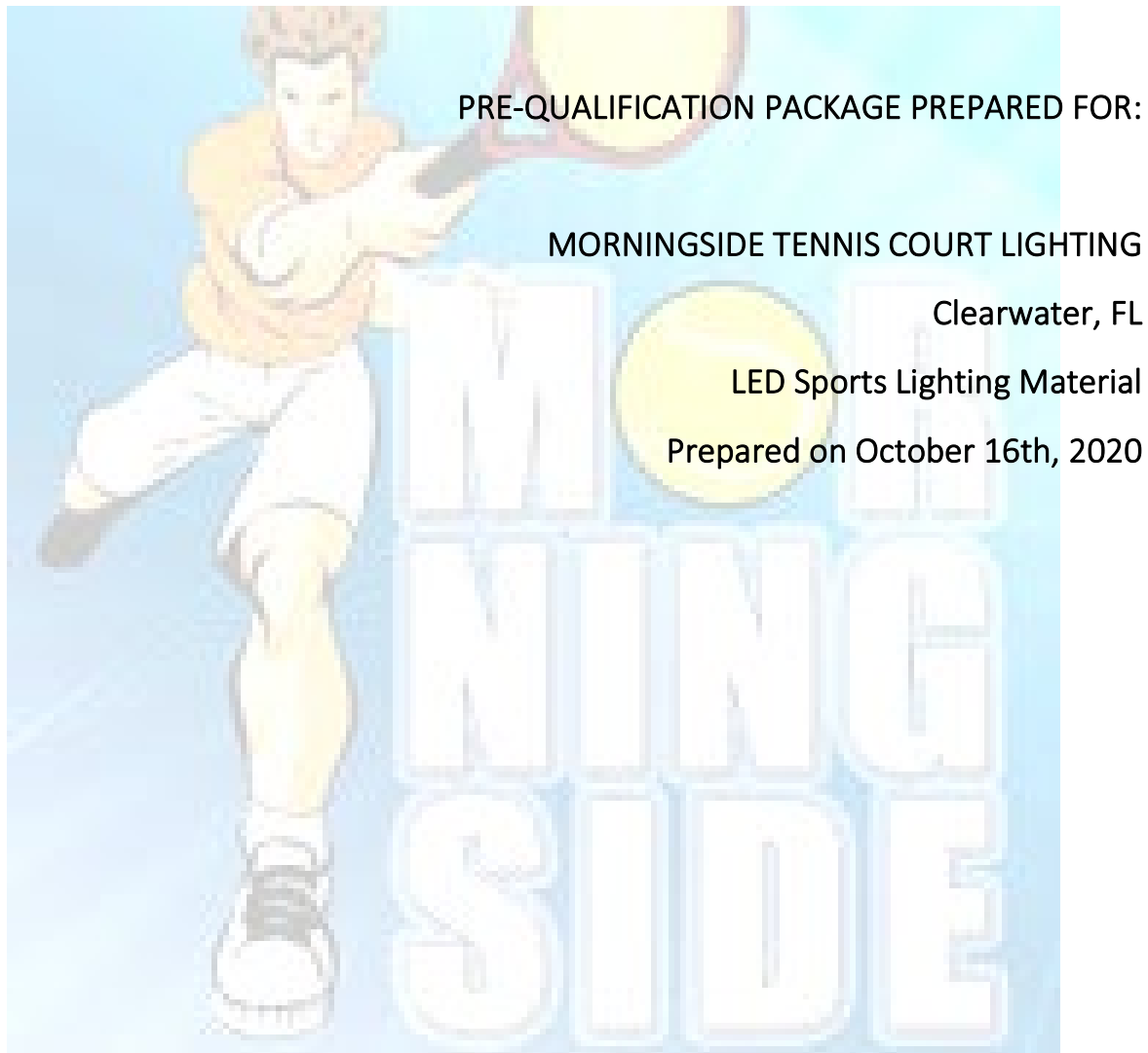
1. Coefficient of Utilization is not applicable to floodlights.
2. Tilt Factor is not applicable to LED fixtures.
3. Foundation design stamped by licensed Florida PE will be provided with formal submittals once order is placed and submittals provided.
4. Pole calculations will be provided with formal submittals once order is placed and submittals provided.
5. Ephesus has provided their standard 10-year warranty in this pre-submittal package. 25-year warranty will be provided for additional cost as noted on material quote.
6. Ephesus design utilizes 40' pole. Per Ephesus' designer, this is the proper pole height for Class II and III courts. A 50' pole design will be provided for additional cost as noted on material quote.

Featured Florida Projects

<u>Project Name</u>	<u>Field Type</u>	<u>City</u>	<u>State</u>
Addition Financial Arena - UCF	Basketball, Volleyball	Orlando	FL
Amalie Arena - Tampa Bay Lightning	Hockey	Tampa	FL
American Airlines Arena-Miami Heat	Basketball	Miami	FL
Billy Bowlegs Park	Football, Soccer, Basketball	Ft. Myers	FL
The Bolles School	Football, Aquatic Center	Jacksonville	FL
Brewster Field	Soccer, Tennis	Belleair	FL
Central Broward Regional Stadium	Cricket, Multipurpose	Lauderhill	FL
Devon Aire Park	Basketball	Miami	FL
Disney Wide World of Sports	Softball/Soccer	Orlando	FL
Florida Hospital Center Ice	Hockey	Wesley Chapel Fort	FL
Florida Southwest State Arena	Basketball	Myers	FL
Hertz Arena	Hockey	Fort Myers	FL
International Polo Club	Horse Arena/Soccer	Wellington	FL
Jacksonville Jaguars Flex Field	Football	Jacksonville	FL
Jules F. Sumner High School	Football, Baseball, Softball	Riverview	FL
Miami Dolphins Hard Rock Stadium	Football	Miami	FL
Miami Open - Hard Rock Campus	Tennis	Miami	FL
North County District Park	Soccer, Multipurpose	Palm Beach Gardens	FL
North Palm Beach Country Club	Aquatic Center	North Palm Beach	FL
Northwest Florida State College Arena	Basketball	Niceville	FL
Orangewood Christian School	Baseball	Maitland	FL
Pensacola Christian College	Baseball, Soccer	Pensacola	FL
Sebring International Raceway	Race Track	Sebring	FL
South Plantation High School	Football	Plantation	FL
Southeast High School	Football	Bradenton	FL
Stephen C. O'Connell Center - UF	Basketball, Volleyball	Gainesville	FL
Trinity Prep High School	Football	Winter Park	FL
UCF Nicholson Indoor Practice Football	Football	Orlando	FL
University of Miami Arena	Basketball	Coral Gables	FL
Venice High School	Football	Venice	FL



Premier Partner for Eaton's Ephesus Sports Lighting



PRE-QUALIFICATION PACKAGE PREPARED FOR:

MORNINGSIDE TENNIS COURT LIGHTING

Clearwater, FL

LED Sports Lighting Material

Prepared on October 16th, 2020

PLEASE ALLOW THIS PRE-QUALIFICATION SUBMITTAL PACKAGE TO BE REVIEWED FOR COMPLIANCE OF THE 30 FOOT-CANDLE (RECREATIONAL LEVEL OF PLAY) AT THE TENNIS COURTS AT MORNINGSIDE RECREATION. NGU SPORTS LIGHTING IN CONJUNCTION WITH THE INSTALLING CONTRACTOR ARE MEETING THE 10-DAY PRIOR APPROVAL. PLEASE ALLOW A COMPETITIVE BID PROCESS AND SELECT NGU SPORTS LIGHTING AS AN APPROVED MANUFACTURER.



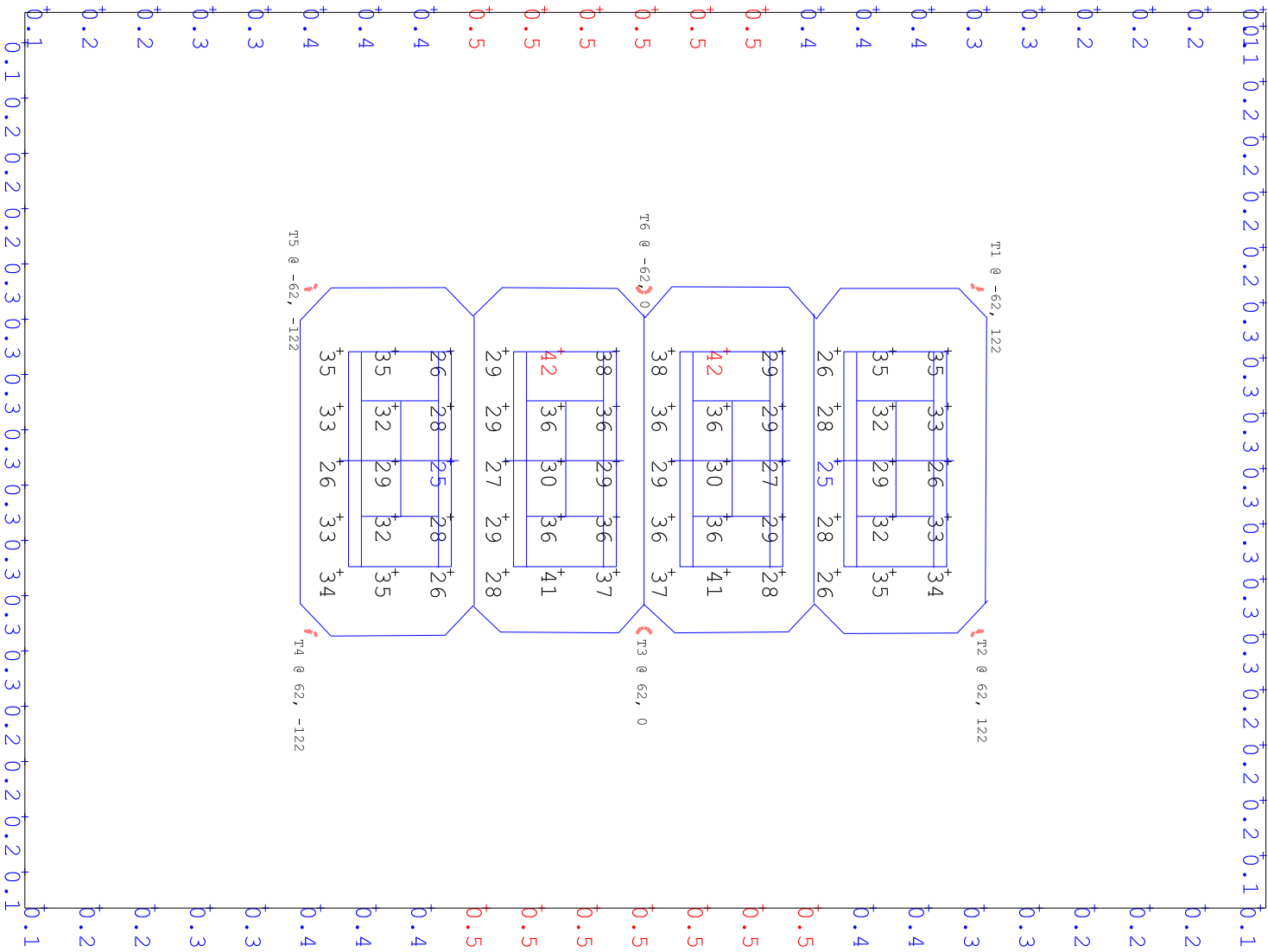
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WARRANTY	14-15



To: Morningside Tennis		Job/Project Name: MORNINGSIDE TENNIS	
BOM - Bill Of Material - BOM			
Design Reference #: LD20139A			
Qty	Mfg	Description	
24	COOP	Lumasport	
6	MAK	40' MH Anchor Base Steel Poles	
6	MAK	4-Fixture Crossarm	
1	NGU	10-Year Parts & Labor Warranty	
Lead Time: 6-8 weeks			
Notes			
Project Scope: • NGU to provide a fully pre-wired system. Cross arms are tubular and pre-wired to a pole length drop cable. The drop cable is wired into a provide disconnect box mounted at 10' AFG. A total of (6) 40' poles, (6) 4-light cross arms and (24) LED Ephesus Lumasport fixtures. • NGU's standard warranty is 10 years. We can provide a 25 year warranty and this has been priced through the contractor.			
Printed: 10/27/20 14:34:18			

Note regarding mounting heights: From a cost savings, NGU/Ephesus chose 40' mounting heights. Our lighting design holds a current LC and assisted in the authoring of the NA IES RP6. The mounting height of 40' is the appropriate height for Class III or IV tennis.



Luminaire Schedule							
Symbol	Qty	Label	LLF	Description	Lum. Watts	Total Watts	Lum. Lumens
	24	5S	0.950	EPH-LS-08-0320L-57-70-5S	344	8256	54294

Calculation Summary													
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	CV	UG	# Pts	PtSpclr	PtSpctb	Grid Z
All Courts	Illuminance	Fc	32.00	42	25	1.28	1.68	0.14	1.46	60	20	20	3
Spill at 100'	Illuminance	Fc	0.30	0.5	0.1	3.00	5.00	N.A.	N.A.	78	20	N.A.	3

THIS IS NOT A CONSTRUCTION DOCUMENT

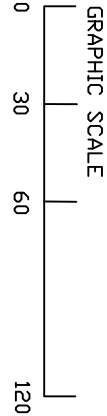
NOTICE: THIS DRAWING IS THE EXCLUSIVE PROPERTY OF NGU SPORTS LIGHTING, LLC. ITS ACCEPTANCE CONSTITUTES AGREEMENT THAT THE DRAWING WILL BE TREATED AS CONFIDENTIAL. IT IS TO BE RETURNED UPON REQUEST AND IS NOT TO BE COMMUNICATED, DISCLOSED, OR COPIED EXCEPT AS EXPRESSLY AUTHORIZED BY NGU.

THE INTENT OF THIS LIGHTING LAYOUT IS TO SUGGEST THE BEST UTILIZATION AND THE PERFORMANCE OF EPHEBUS LUMINAIRES REPRESENTED HERE. IT WAS BASED UPON INFORMATION PROVIDED TO NGU SPORTS LIGHTING, LLC AND ANY VARIATION FROM DESIGN TO INSTALLATION MAY AFFECT THE EXPECTED RESULTS.



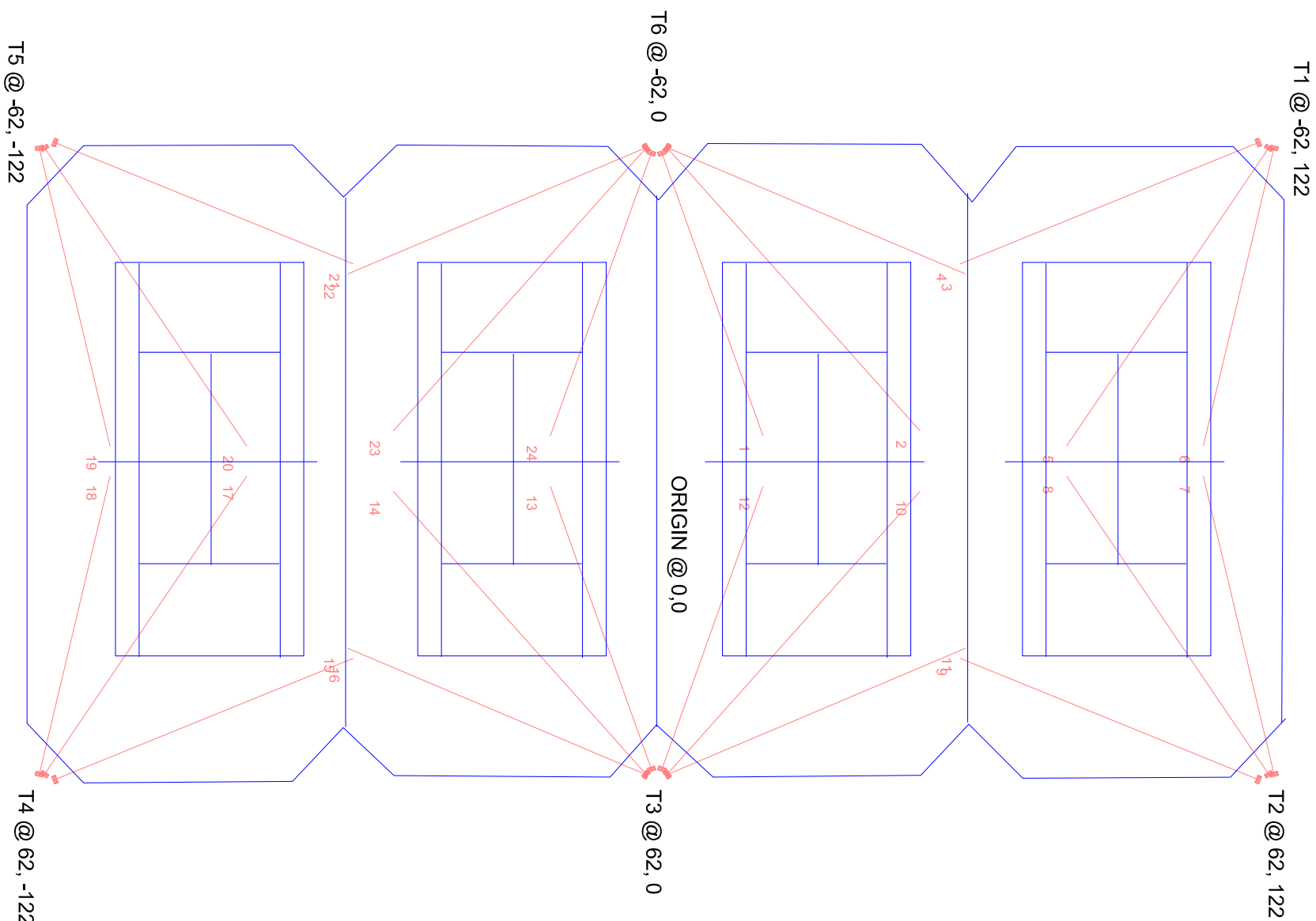
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Palm Beach Gardens, FL 33410
www.NGUsportslighting.com

Passion and Commitment exclusively for Ephesus LED Sports Lighting



MORNINGSIDE ATHLETIC CENTER TENNIS COURT LIGHTING 40' MOUNTING HEIGHT POLES 30 FOOTCANDLES AVERAGE SPILL LIGHT AT 100' ADDED			
DESIGNED BY	DATE	SCALE	DRAWING NUMBER
H. JOHNSON, LLC	11/03/2020	1" = 30'	LD20139A1

Luminaire Schedule					
Symbol	Qty	Label	LLF	Description	
	24	SS	0.950	EPHLS-08-0320L-57-70-5S	
				Lum. Watts	Total Watts
				344	8256
				54294	



Expanded Luminaire Location Summary									
LumNo	Label	X	Y	Z	Orient	Tilt	X-Aimpt	Y-Aimpt	
1	SS	-61	1	40	19.654	56.072	-5.001	21	
2	SS	-62	2	40	41.76	61.951	-5.999	52	
3	SS	-62	2	40	67.036	58.026	-37	61	
4	SS	-63	119	40	292.135	57.871	-39.001	60.001	
5	SS	-62	121	40	325.864	60.701	-2.999	80.999	
6	SS	-62	122	40	346.651	56.589	-3	108	
7	SS	62	122	40	193.349	56.589	3	108	
8	SS	62	121	40	214.136	60.701	2.999	80.999	
9	SS	63	119	40	247.865	57.871	39.001	60.001	
10	SS	62	2	40	138.24	61.951	5.999	52	
11	SS	62	2	40	112.964	58.026	37	61	
12	SS	61	1	40	160.346	56.072	5.001	21	
13	SS	61	-1	40	199.654	56.072	5.001	-21	
14	SS	62	-2	40	221.76	61.951	5.999	-52	
15	SS	62	-2	40	247.036	58.026	37	-61	
16	SS	63	-119	40	112.135	57.871	39.001	-60.001	
17	SS	62	-121	40	145.864	60.701	2.999	-80.999	
18	SS	62	-122	40	166.651	56.589	3	-108	
19	SS	-62	-122	40	13.349	56.589	-3	-108	
20	SS	-62	-121	40	34.136	60.701	-2.999	-80.999	
21	SS	-63	-119	40	67.865	57.871	-39.001	-60.001	
22	SS	-62	-2	40	292.964	58.026	-37	-61	
23	SS	-62	-2	40	318.24	61.951	-5.999	-52	
24	SS	-61	-1	40	340.346	56.072	-5.001	-21	

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MORNINGSIDE ATHLETIC CENTER

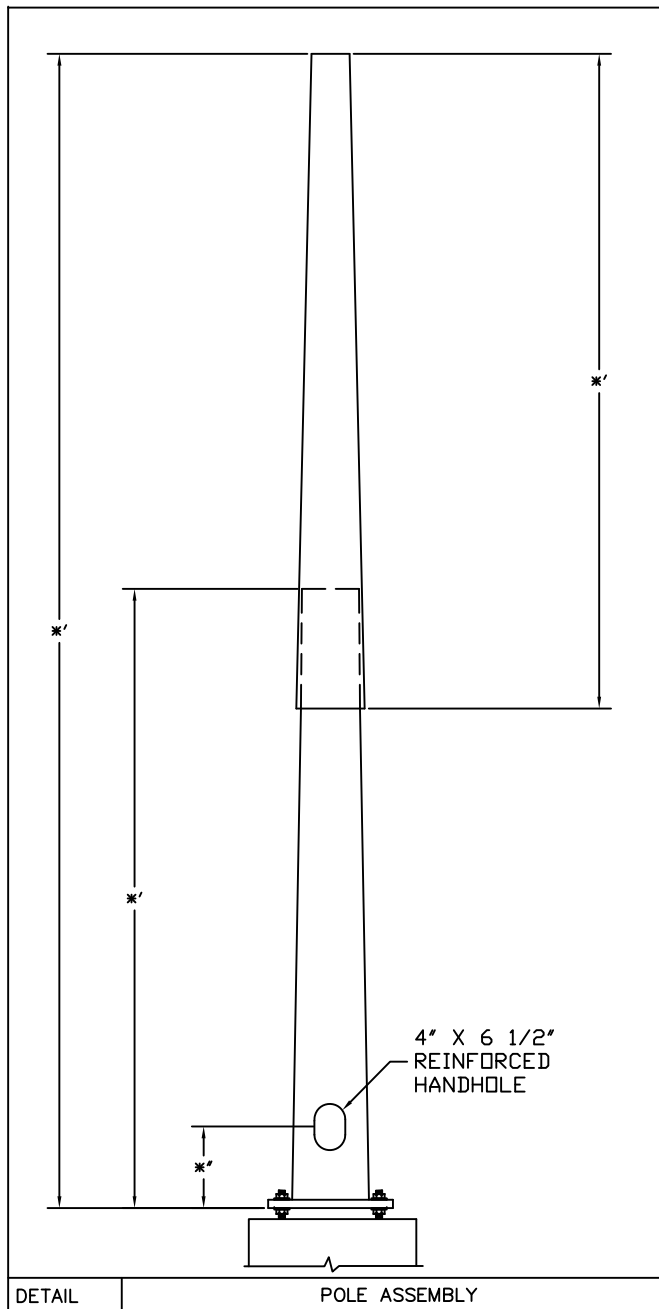
TENNIS COURT LIGHTING

40' MOUNTING HEIGHT POLES

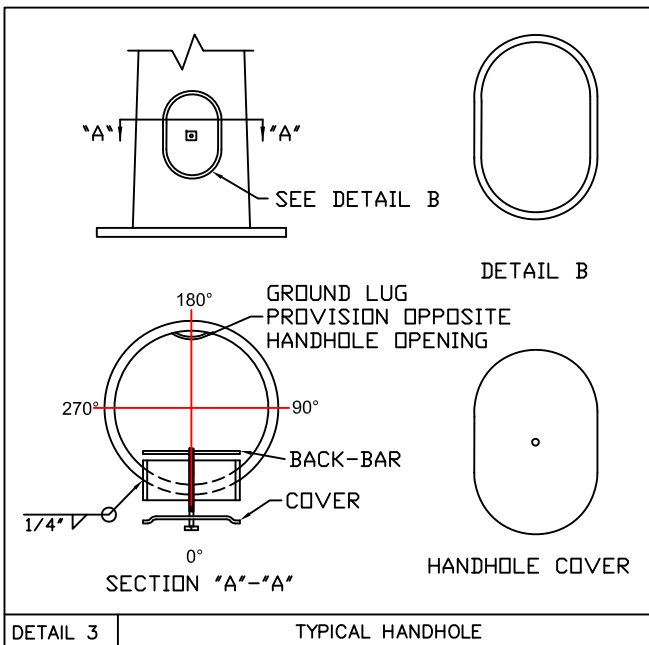
30 FOOTCANDLES AVERAGE

AIMING DIAGRAM & COORDINATES

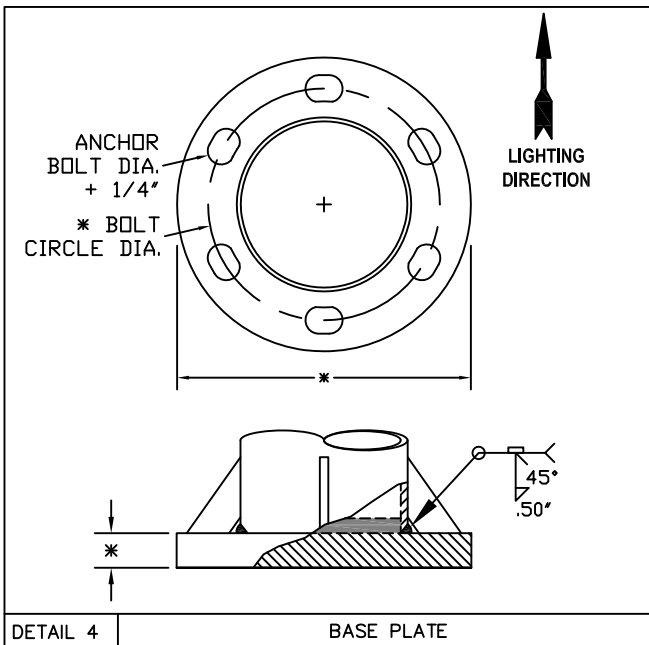
DESIGNED BY	DATE	SCALE	DRAWING NUMBER
H. JOHNSON, LLC	11/03/2020	1" = 30'	LD20139AX



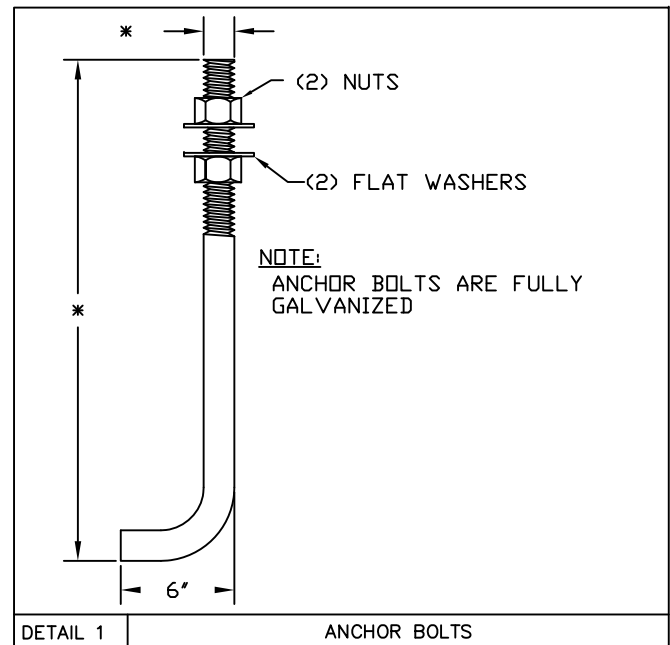
DETAIL 1 POLE ASSEMBLY



DETAIL 3 TYPICAL HANDHOLE



DETAIL 4 BASE PLATE



DETAIL 1 ANCHOR BOLTS

COMPONENT	SPECIFICATION
POLE TOP	ASTM A572 GR. 65
POLE BOTTOM	ASTM A572 GR. 65
MISC. STEEL	ASTM A36
ANCHOR BOLTS	ASTM F1554 GR. 55
BASE PLATE	ASTM A572 GR. 50

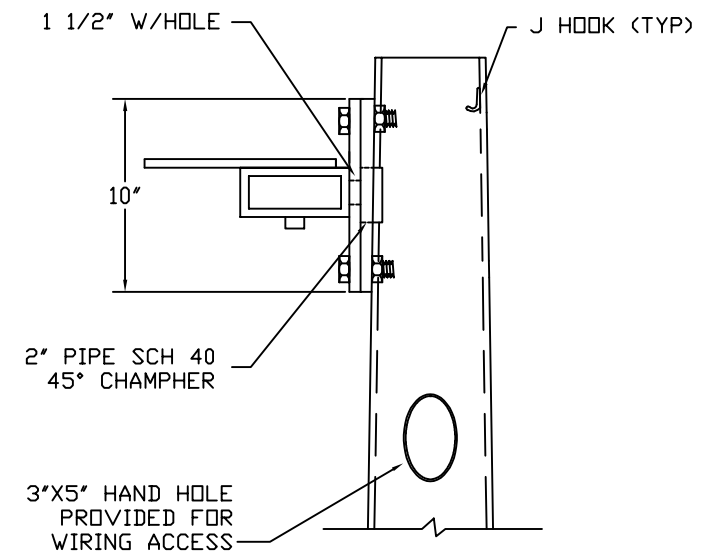
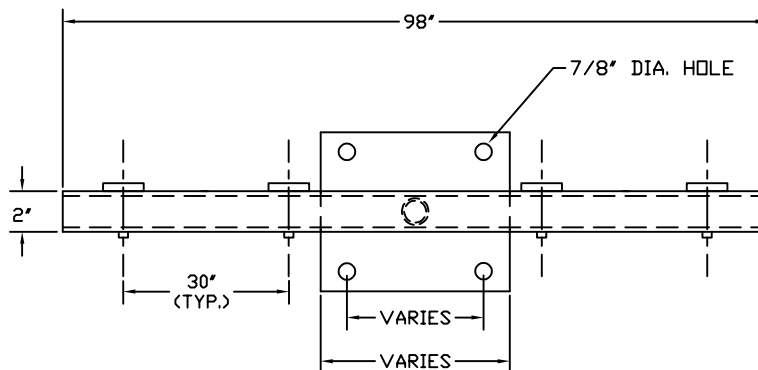
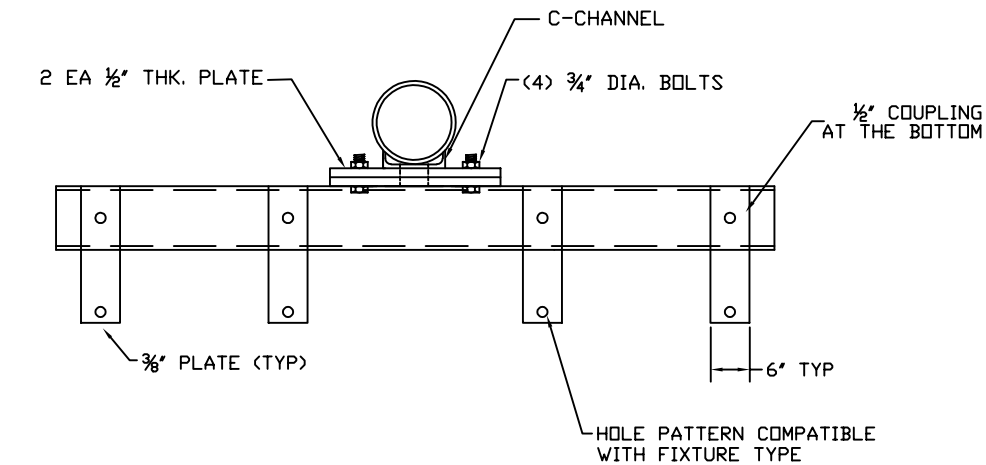
GENERAL NOTES:

1. ALL HARDWARE TO BE GALVANIZED TO ASTM A153.
2. POLE ASSEMBLY TO BE GALVANIZED TO ASTM A123.
3. ALL WELDING TO CONFORM TO AWS D1.1 MOST RECENT EDITION.
4. DESIGN INCORPORATE GUST FACTOR PER REF CODE.
5. REFER TO GENERAL INSTALLATION INSTRUCTIONS PRIOR TO ASSEMBLY.

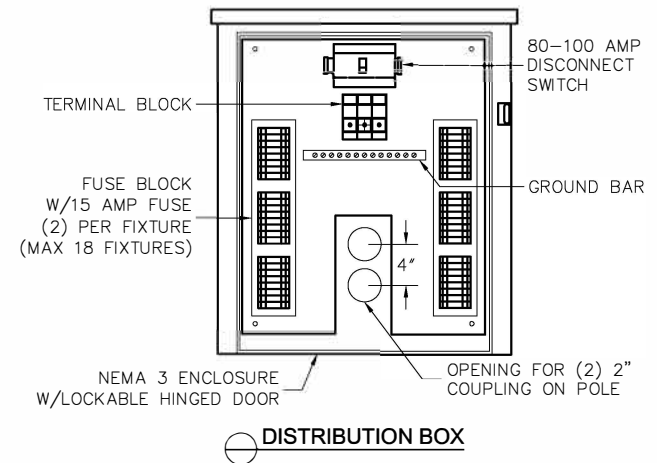
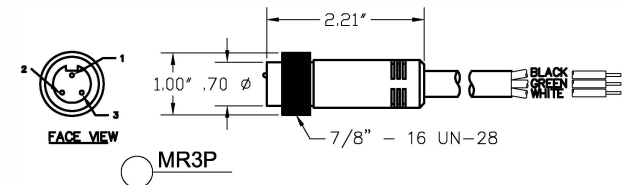
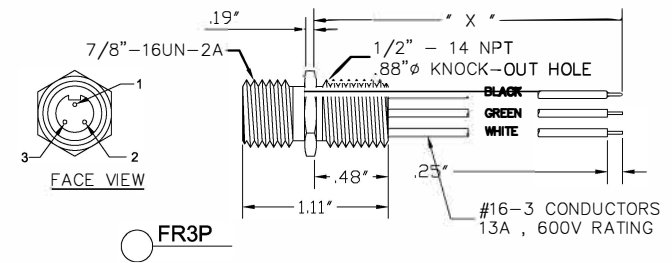
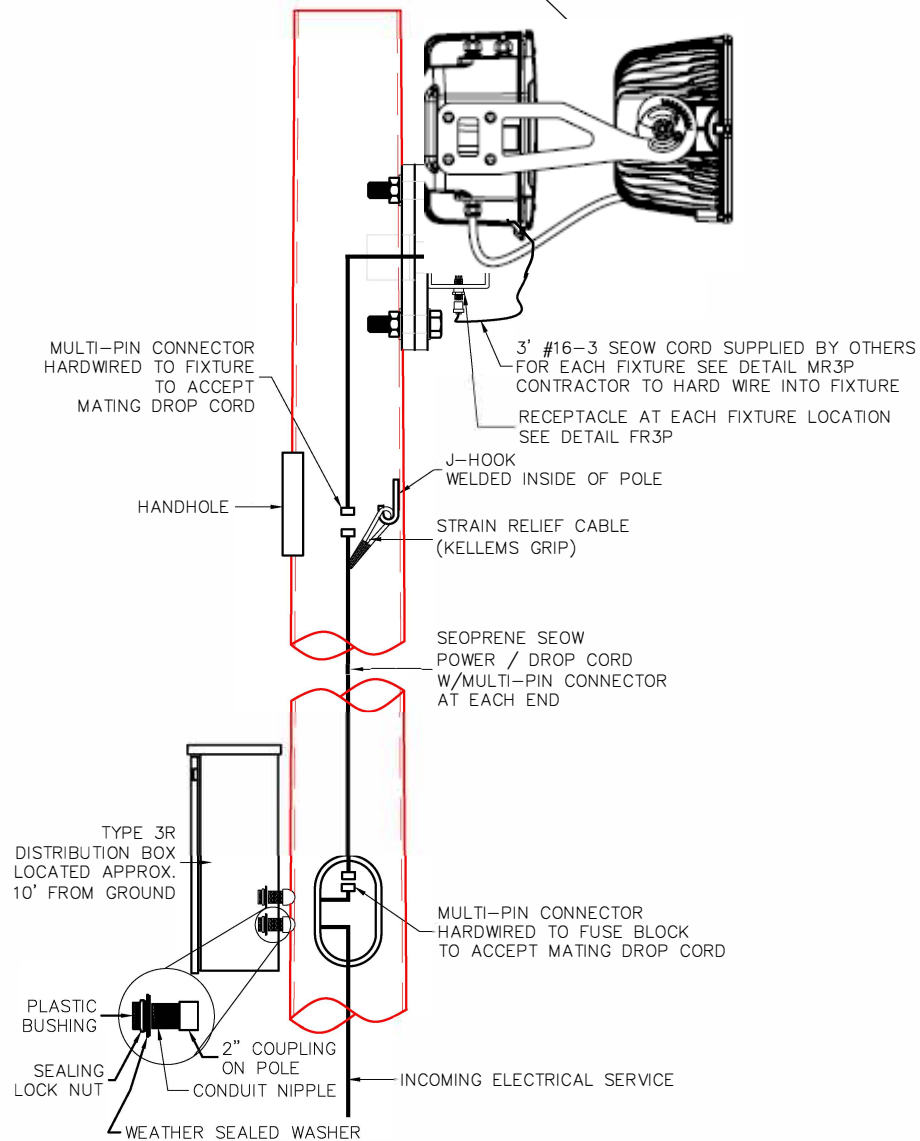
FINISH:	WIND SPEED:	DESIGN CRITERIA:
☒ GALVANIZED	☐ 80 MPH ☐ 110 MPH	☐ AASHTO LTS3 ☐ ASCE
☐ PAINTED	☐ 90 MPH ☐ 120 MPH	☐ AASHTO LTS4/5 ☐ DSA
☐ PAINTED & GALV	☐ 100 MPH ☐ ___ MPH	☐ IBC ☐ UBC

DETAIL 2 MATERIAL SPECIFICATIONS

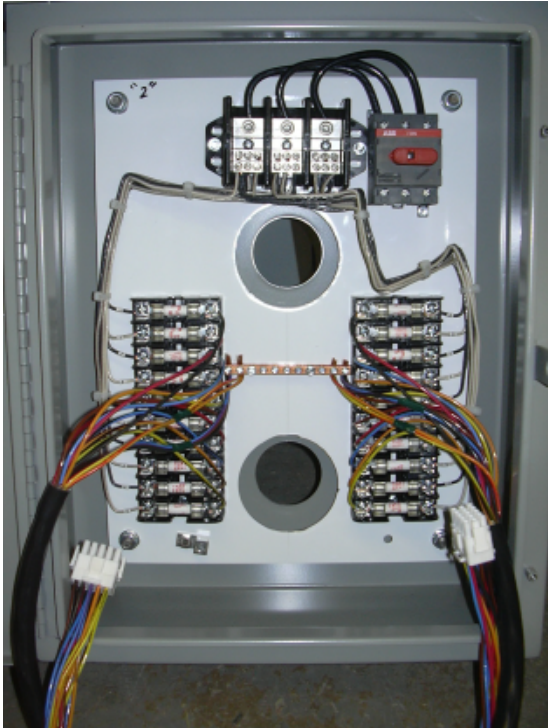
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	00	NA	NTS
DRAWING NUMBER:	DRAWN BY:	QUOTE NUMBER:	



SPORTS FIXTURE (BY OTHERS)
(FOR REFERENCE ONLY)
(ACTUAL FIXTURE MAY NOT BE REPRESENTED)



DATE: 00	REV: 00	CHECKED BY: N/A
DRAWING NUMBER:	DRAWN BY: MSM	



Disconnect Box



3 Pin Female On Cross Arm



3 Pin Connector Male On Fixture



Drop Cable

Project		Catalog #		Type	
Prepared by		Notes		Date	



Ephesus

LUMASPORT 8

White LED Sports & Entertainment Luminaire

Typical Applications

Pro Arenas • University & Collegiate Arenas • University & Collegiate Stadiums • Multi-Event & Convention Centers • Gymnasiums & Field Houses

Interactive Menu

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- Ordering Information [page 2](#)
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- Performance Data [page 3](#)
- Optical Performance Data [page 4](#)
- Sample System Topology [page 5](#)

Product Certification

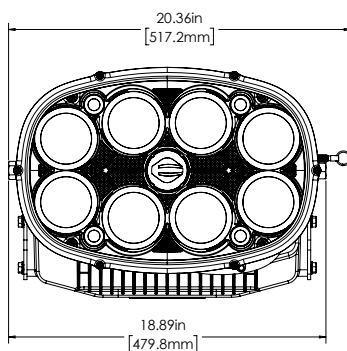


Top Product Features

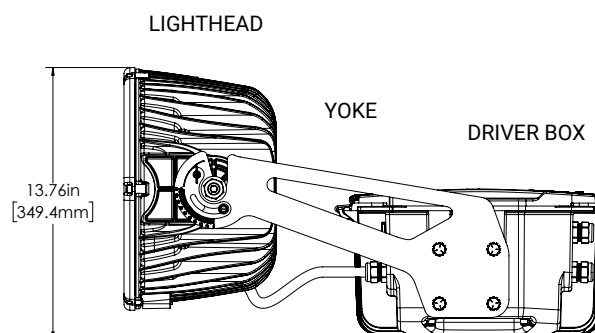
- Hybrid LED Optics
- Redundant Dual Power Option
- Chip-On-Board (CoB) LEDs
- 2-Piece Ease of Assembly
- Custom Control Options

Dimensional Details

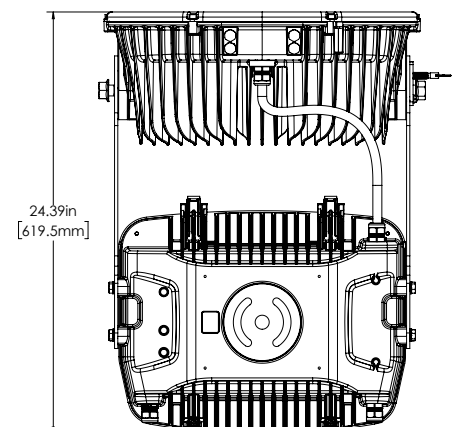
HEAD ON



LEFT PROFILE



BOTTOM



[additional mounting diagrams](#)

Order Information - (320W) LIGHTHEAD

NOTE: A complete fixture requires both a LUMASPORT 8 lighthouse and a corresponding LUMASPORT 8 driver box.

SAMPLE ORDER NUMBER: **EPH-LS-08-0320L-BLK-40-70-1S-C04**

Brand	Family	Model	Power	Color	CCT	CRI	Optic	DC Cable
Brand	Family	Model	Power	Color	CCT	CRI	Optic ²	DC Cable
EPH = Ephesus	LS = Lumasport	08 = 8 Optics	0320L = 320W Local Power ¹	BLK = Black WHT = White	40 = 4000K 50 = 5000K 57 = 5700K	70 = 70 CRI 80 = 80 CRI	1S = NEMA 3 17.5 33.3 2S = NEMA 3 21.9 40.2 3S = NEMA 3 25.4 45.7 4S = NEMA 4 36.0 64.4 5S = NEMA 5 46.6 82.6 7F = NEMA 7 72.5 131	C04 = 4ft Cable ²

NOTES:

- (1) Local Power means that the lighthouse is attached to the driverbox with the yoke mount.
- (2) DC Cable connecting the lighthouse to the driverbox.
- (3) Optic = NEMA TYPE; BEAM ANGLE; FIELD ANGLE. Additional optical performance data within spec sheet.

Order Information - (320W) DRIVER BOX

NOTE: A complete fixture requires both a LUMASPORT 8 lighthouse and a corresponding LUMASPORT 8 driver box.

SAMPLE ORDER NUMBER: **EPH-LS-0320L-BLK-LV-AM-LY-BP**

Brand	Family	Power	Color	Voltage	Control	Mount	Packaging
Brand	Family	Power	Color	Voltage ²	Control	Mount	Packaging
EPH = Ephesus	LS = Lumasport	0320L = 320W Local Power ¹	BLK = Black WHT = White	LV = Low Voltage HV = High Voltage	AM = Air Mesh LB = Landburst (DMX) NC = No Control	LY = Local Yoke	BP = Bulk Pack

NOTES:

- (1) Local Power means that the lighthouse is attached to the driverbox with the yoke mount.
- (2) Reference performance data for voltage range

Order Information - (640W) LIGHTHEAD

NOTE: A complete fixture requires both a LUMASPORT 8 lighthouse and a corresponding LUMASPORT 8 driver box.

SAMPLE ORDER NUMBER: **EPH-LS-08-0640L-BLK-40-70-1S-C04**

Brand	Family	Model	Power	Color	CCT	CRI	Optic	DC Cable
Brand	Family	Model	Power	Color	CCT	CRI	Optic ²	DC Cable
EPH = Ephesus	LS = Lumasport	08 = 8 Optics	0640L = 640W Local Power ¹	BLK = Black WHT = White	40 = 4000K 50 = 5000K 57 = 5700K	70 = 70 CRI 80 = 80 CRI	1S = NEMA 3 17.5 33.3 2S = NEMA 3 21.9 40.2 3S = NEMA 3 25.4 45.7 4S = NEMA 4 36.0 64.4 5S = NEMA 5 46.6 82.6	C04 = 4ft Cable ²

NOTES:

- (1) Local Power means that the lighthouse is attached to the driverbox with the yoke mount.
- (2) DC Cable connecting the lighthouse to the driverbox.
- (3) Optic = NEMA TYPE; BEAM ANGLE; FIELD ANGLE. Additional optical performance data within spec sheet.

Order Information - (640W) DRIVER BOX

NOTE: A complete fixture requires both a LUMASPORT 8 lighthouse and a corresponding LUMASPORT 8 driver box.

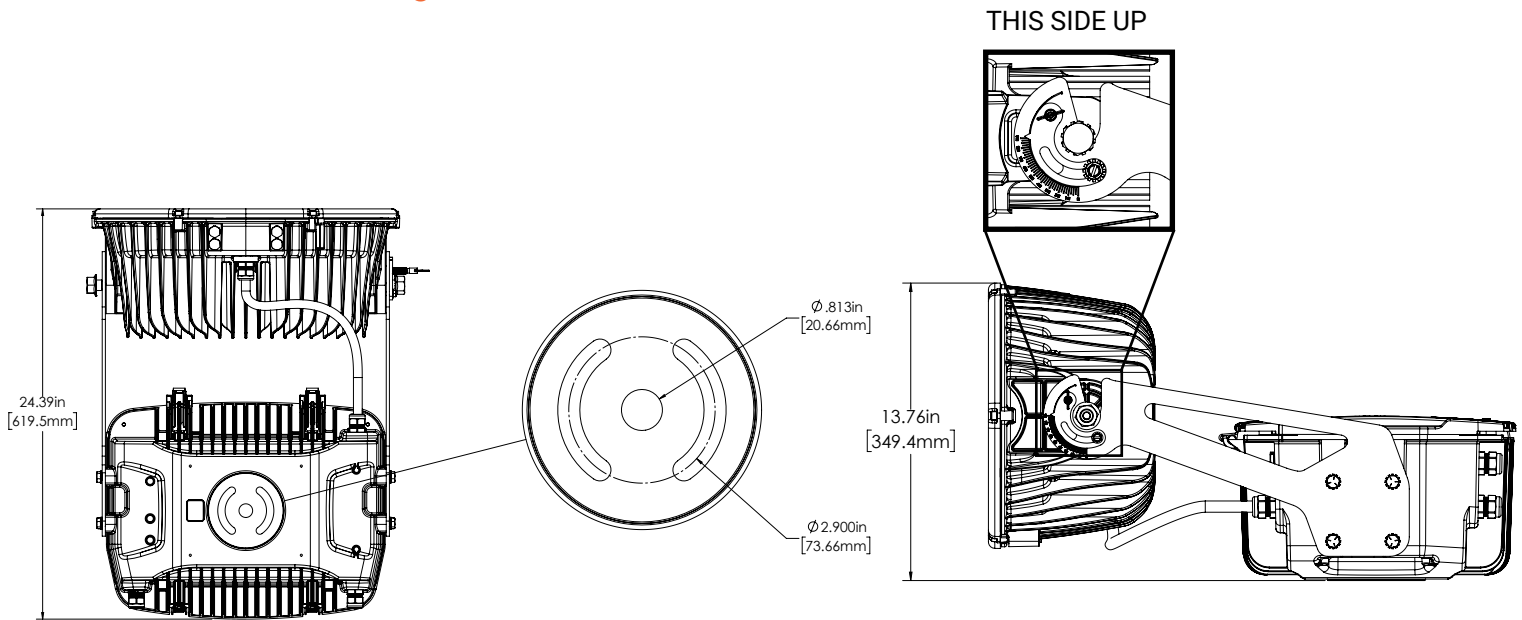
SAMPLE ORDER NUMBER: **EPH-LS-0640L-BLK-LV-AM-LY-BP**

Brand	Family	Power	Color	Voltage	Control	Mount	Packaging
Brand	Family	Power	Color	Voltage ²	Control	Mount	Packaging
EPH = Ephesus	LS = Lumasport	0640L = 640W Local Power ¹	BLK = Black WHT = White	LV = Low Voltage HV = High Voltage	AM = Air Mesh LB = Landburst (DMX) NC = No Control	LY = Local Yoke	BP = Bulk Pack

NOTES:

- (1) Local Power means that the lighthouse is attached to the driverbox with the yoke mount.
- (2) Reference performance data for voltage range

Dimensional and Mounting Details



Performance Data

	LUMASPORT 8 (320W)	LUMASPORT 8 (640W)
Lumen Output Range⁵	48,303 - 55,419lm	80,572 - 92,929lm
System Power (W)	320W	640W
Input Voltage (Low Voltage)	120-277VAC	120-277VAC
Input Voltage (High Voltage)	347-480VAC	347-480VAC
Efficacy Range⁵	140.4 - 163.5 lm/W	117.5 - 139.3 lm/W
CRI³	70, 80	70, 80
TLCI⁶	75	75
CCT Range	4000K, 5000K, 5700K	4000K, 5000K, 5700K
Distribution (NEMA)	3-5, 7	3-5
Dimming Range	DIM TO OFF, 10%-100%	DIM TO OFF, 10%-100%
Operating Temperature Range	-40°C to +40°C	-40°C to +40°C
Usage	INDOOR, OUTDOOR	INDOOR, OUTDOOR
Mounting Options (1.5G RATED)	LOCAL YOKE	LOCAL YOKE
Electrical Certifications	FCC, UL8750, UL1598	FCC, UL8750, UL1598
Environmental Certifications	ANSI C136.31-2010 1.5G, IP66	ANSI C136.31-2010 1.5G, IP66
NEMA Rating	NEMA 4X ⁴	NEMA 4X ⁴
Surge	10kV	10kV
Effective Projected Area (EPA)	1.8 (sq. ft.)	1.8 (sq. ft.)
Approximate Weight¹	67.5 LBS	71.5 LBS

NOTES:

- (1) Weight may vary depending on mounting bracket, lighthead and driverbox selection.
- (2) Specifications are subject to change without notice.
- (3) Values are +/- 2%.
- (4) When driverbox is mounted in upright position.
- (5) Refer to Optical Performance Data.
- (6) Values are +/- 3 points.

Optical Performance Data

LUMASPORT 8 (320W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	LP/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	53987	346	156.0	17.5	33.3
			5000K	54903	346	158.7	17.5	33.3
			5700K	53943	346	155.9	17.5	33.3
		80	4000K	50877	346	147.0	17.5	33.3
			5000K	51822	346	149.8	17.5	33.3
			5700K	50916	346	147.2	17.5	33.3
2S	NEMA 3	70	4000K	54494	339	160.7	21.9	40.2
			5000K	55419	339	163.5	21.9	40.2
			5700K	54450	339	160.6	21.9	40.2
		80	4000K	51346	339	151.5	21.9	40.2
			5000K	52308	339	154.3	21.9	40.2
			5700K	51400	339	151.6	21.9	40.2
3S	NEMA 3	70	4000K	53275	344	154.9	25.4	45.7
			5000K	54179	344	157.5	25.4	45.7
			5700K	53232	344	154.7	25.4	45.7
		80	4000K	50200	344	145.9	25.4	45.7
			5000K	51137	344	148.7	25.4	45.7
			5700K	50209	344	146.0	25.4	45.7
4S	NEMA 4	70	4000K	53419	344	155.3	36.0	64.4
			5000K	54325	344	157.9	36.0	64.4
			5700K	53375	344	155.2	36.0	64.4
		80	4000K	50335	344	146.3	36.0	64.4
			5000K	51275	344	149.1	36.0	64.4
			5700K	50344	344	146.3	36.0	64.4
5S	NEMA 5	70	4000K	54338	344	158.0	46.6	82.6
			5000K	55260	344	160.6	46.6	82.6
			5700K	54294	344	157.8	46.6	82.6
		80	4000K	51202	344	148.8	46.6	82.6
			5000K	52158	344	151.6	46.6	82.6
			5700K	51211	344	148.9	46.6	82.6
7F	NEMA 7	70	4000K	51262	344	149.0	72.5	131.0
			5000K	52132	344	151.5	72.5	131.0
			5700K	51220	344	148.9	72.5	131.0
		80	4000K	48303	344	140.4	72.5	131.0
			5000K	49205	344	143.0	72.5	131.0
			5700K	48312	344	140.4	72.5	131.0

LUMASPORT 8 (640W) Lumen Outputs								
Optic	NEMA TYPE	CRI	CCT	Lumens	Input Power (W)	Lm/W	Beam Angle	Field Angle
1S	NEMA 3	70	4000K	85498	686	124.6	17.5	33.3
			5000K	88248	686	128.6	17.5	33.3
			5700K	86402	686	126.0	17.5	33.3
		80	4000K	80572	686	117.5	17.5	33.3
			5000K	83295	686	121.4	17.5	33.3
			5700K	81554	686	118.9	17.5	33.3
2S	NEMA 3	70	4000K	90033	667	135.0	21.9	40.2
			5000K	92929	667	139.3	21.9	40.2
			5700K	90985	667	136.4	21.9	40.2
		80	4000K	84832	667	127.2	21.9	40.2
			5000K	87713	667	131.5	21.9	40.2
			5700K	85888	667	128.8	21.9	40.2
3S	NEMA 3	70	4000K	88702	681	130.3	25.4	45.7
			5000K	91555	681	134.4	25.4	45.7
			5700K	89640	681	131.6	25.4	45.7
		80	4000K	83582	681	122.7	25.4	45.7
			5000K	86415	681	126.9	25.4	45.7
			5700K	84550	681	124.2	25.4	45.7
4S	NEMA 4	70	4000K	88659	681	130.2	36.0	64.4
			5000K	91510	681	134.4	36.0	64.4
			5700K	89596	681	131.6	36.0	64.4
		80	4000K	83541	681	122.7	36.0	64.4
			5000K	86372	681	126.8	36.0	64.4
			5700K	84508	681	124.1	36.0	64.4
5S	NEMA 5	70	4000K	89953	681	132.1	46.6	82.6
			5000K	92846	681	136.3	46.6	82.6
			5700K	90904	681	133.5	46.6	82.6
		80	4000K	84761	681	124.5	46.6	82.6
			5000K	87633	681	128.7	46.6	82.6
			5700K	85742	681	125.9	46.6	82.6

Project Number: _____

Date of Shipment _____

Ephesus Fixture Limited Warranty (“Warranty” or “Contract”)**I. What the Warranty Covers**

Cooper Lighting, LLC (“Cooper”) warrants to the end user of the original installation location (“You” or “User”) that new Cooper fixtures purchased from Cooper or an authorized distributor (“Products”) shall, **for a period of ten (10) years from the date of original shipment (the “Warranty Period”), be free from defects in material and workmanship of the Cooper fixtures.** During the Warranty Period, Cooper’s sole obligation, and User’s sole remedy, shall be, at Cooper’s sole discretion, to repair, replace, or provide a refund for Products found to be defective as defined herein. Cooper shall not be responsible for any other costs, including for the costs of: labor relating to de-installation of any defective Product or re-installation of any replacement Product; the shipment of defective or replacement Product; or post-installation testing of any Product for purposes of this Warranty. Cooper shall not be bound by any terms, conditions, or representations, which are not stated herein including, but not limited to, any statements made by distributors or re-sellers.

II. What Voids or is Not Covered Under the Warranty

This Warranty is void, and Cooper shall have no liability hereunder, with respect to a Product if You or any person other than an employee, independent contractor, or subcontractor of Cooper: (a) install(s) or use a Product in a manner that is not in accordance with the applicable specifications and instructions, including, but not limited to, over/under voltage or current conditions, excessive switching cycles, operating hours, or outside any applicable operating conditions; (b) without the prior written consent of Cooper, modify, tamper, or disassemble a Product, including, without limitation, alter serial numbers or removes factory supplied stickers or labels of a Product; or (c) use unauthorized components, parts, accessories, or other materials to repair a Product.

This Warranty does not cover:

- a) cosmetic defects;
- b) damage, defects, or failure caused by:
 - i. acts of God;
 - ii. accident, misuse, misapplication, abuse, negligence, or modification of any part of the Product;
 - iii. improper storage, installation, repair, operation, inspection or maintenance;
 - iv. the use of unauthorized components, parts, accessories, or other materials or by equipment or products manufactured by someone other than Cooper;
 - v. wrong or inadequate electrical current or connection; or
 - vi. transit.
- c) Other equipment or products manufactured by someone other than Cooper.
- d) Labor or contractor costs associated with removing or replacing Cooper lighting fixtures.

III. Warranty Activation / Service Claims

You must make a valid Warranty claim to Cooper in order to receive coverage under the Warranty. Warranty claims can be serviced by contacting Cooper’s customer service and sales center:

Phone: (315) 579-2873

Email: ephesuswarranty@eaton.com

If you are unsure whether a situation exists that is covered by the Warranty, please contact Cooper’s customer service and sales center at the phone number or email address listed above for assistance.

IV. Replacement of or Repair to Product

Cooper, in its discretion, may use comparable product of equal or greater value to replace a Product that meets the conditions of this Warranty. Furthermore, in performing repairs to a Product that meets the conditions of this Warranty, Cooper reserves the right to utilize new, reconditioned, refurbished, repaired or remanufactured products or parts. Repaired or replaced Products are warranted for the remainder of the original Warranty Period. Cooper reserves the right to examine all returned Products, their specific installation location, and patterns of usage to determine the cause of failure.

V. Limitation of Warranty

THE FOREGOING WARRANTIES ARE EXCLUSIVE EXCEPT FOR WARRANTY OF TITLE. COOPER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CORRECTION OF NON-CONFORMITIES IN THE MANNER AND FOR THE PERIOD OF TIME PROVIDED ABOVE SHALL CONSTITUTE COOPER’S SOLE LIABILITY AND USER’S EXCLUSIVE REMEDY FOR FAILURE OF COOPER TO MEET ITS WARRANTY OBLIGATIONS, WHETHER CLAIMS OF THE USER ARE BASED IN CONTRACT (INCLUDING WARRANTY), IN TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE.

VI. Limitation of Liability

THE REMEDIES OF THE USER SET FORTH IN THIS WARRANTY ARE EXCLUSIVE AND ARE USER’S SOLE REMEDIES FOR ANY FAILURE OF COOPER TO COMPLY WITH ITS OBLIGATIONS HEREUNDER. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY, IN NO EVENT SHALL COOPER BE LIABLE IN CONTRACT (INCLUDING WARRANTY), IN TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE FOR DAMAGE TO PROPERTY OR EQUIPMENT OTHER THAN PRODUCTS TO WHICH THIS WARRANTY RELATES, LOSS OF PROFITS OR REVENUE, LOSS OF USE OF PRODUCTS, COST OF CAPITAL, CLAIMS OF CUSTOMERS OF THE USER OR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, REGARDLESS OF WHETHER SUCH POTENTIAL DAMAGES ARE FORESEEABLE OR IF USER HAS BEEN ADVISED OF SUCH DAMAGES. THE TOTAL CUMULATIVE LIABILITY OF COOPER ARISING FROM OR RELATED TO THIS CONTRACT WHETHER THE CLAIMS ARE BASED IN CONTRACT (INCLUDING WARRANTY), IN TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE, SHALL NOT EXCEED THE PRICE OF THE PRODUCT OR SERVICES ON WHICH SUCH LIABILITY IS BASED.

VII. Severability

If any term or provision of this Warranty, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this Warranty, or the application of such terms or provision, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be effected, and every other term and provision of this contract shall be deemed valid and enforceable to the extent permitted by law.

VIII. Choice of Law

The Warranty shall be construed and enforced in accordance with the laws of the state of Georgia and the laws of the United States applicable in that state.

IX. Other Terms and Conditions

All other terms and conditions in Cooper’s domestic Terms and Conditions shall apply.

Project Number: _____

Date of Shipment _____

Light Level Addendum to Ephesus Fixture Limited Warranty (“Minimum Light Level Addendum”)

This Light Level Addendum is issued to User to supplement the Ephesus Fixture Limited Warranty (“Warranty”) for Products in the above referenced project number. This Light Level Addendum is subject to the terms, conditions, and limitations set forth in the Warranty. All capitalized terms used herein shall have the meaning ascribed to them in the Warranty.

I. What this Light Level Addendum Covers

Cooper, in the event it determines that a Cooper lighting system at a site in the project referenced above does not meet, because of defect(s) in the material or workmanship of Products, the minimum light levels specified for such site in the project documents, will provide to User, at no cost to the User, the necessary materials to bring the light levels produced by such Cooper lighting system to at least the minimum light levels specified for such site in the project documents (“Covered Service”).

II. What Voids or is Not Covered Under this Light Level Addendum

In addition to the items or conditions set forth in the Warranty that void the Warranty and therefore void this Light Level Addendum, the following void this Light Level Addendum:

- a) Any changes made to the lighting environment at the site after installation of the Cooper lighting system at the site that could impact light levels, including, without limitation, obstructions, structural changes, and other elements that could produce light interference or contamination.
- b) Installation of all or part of the Cooper lighting system, including Products, on structural components that do not offer the optimal structural stability, including, without limitation, wooden poles.

III. Light Level Addendum Administration

After You make a Warranty claim to Cooper consistent with the terms of the Warranty and Cooper determines that you are entitled to the Covered Service, You must submit to Cooper quotes from at least two (2) authorized Cooper service providers for the performance of the Covered Service. Cooper shall, at its discretion: (i) authorize You to accept one (1) quote from an authorized Cooper service provider and to proceed with the Covered Service with such service provider consistent with the quote; (2) obtain quotes from additional service providers and engage one of such service providers to provide the Covered Service; or (3) perform the Covered Service using its own personnel.