



NGU Sports Lighting, LLC

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 Palm Beach Gardens, FL 33410
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www.ngusportslighting.com

OFFER OF BUSINESS

PROJECT NAME

Forest Park
 LED Sports Lighting New Construction

TO: Peter McNiece
 City of Gainesville
 Thomas Center, Building B, 3rd Floor
 306 NE Sixth Ave.
 Gainesville, FL 32601

Offer of Business #: 2022101429

DATE: 11/28/2022

EXPIRATION DATE: 12/19/2022

SOURCEWELL CONTRACT # : 071619

Following up on the inquiry for Forest Park we are pleased to provide you with an offer of business, for the project located in Gainesville, FL. NGU Sports Lighting provides state of the art LED lighting systems.

NGU Sports Lighting will provide a new solid-state LED sports lighting system for the Sports Park according to lighting design #LD21304J. NGU intends to provide a complete system with material, installation, and project management services including running power from the central location to the base of the poles. This system will incorporate a wireless communication system (AirMesh) with remote control programming for up to eight standard or dynamic scenes and includes operational training.

The new system will include new poles, cross arms and utilizing the Lumasport 8 640 watt fixtures, mounting hardware, an AirMesh wireless control system and a 10-year equipment warranty covering the LED fixtures.

TOTAL PURCHASE PRICE: \$890,000

BILL OF MATERIAL

PART	DESCRIPTION	QUANTITY	LEAD TIME
Fixture(s)			
Basketball - Mix Use	Lumasport -8 640 watt fixtures	12	To be developed, when P.O. is received
Field 1	Lumasport-8 640 watt fixtures	40	
Field 2	Lumasport-8 640 watt fixtures	40	
Field 3	Lumasport-8 640 watt fixtures	40	
Small Soccer	Lumasport-8 640 watt fixtures	16	
Volleyball	Lumasport -8 640 watt fixtures	6	
CV1	Visors for fixtures with sensitive spill	138	

Infrastructure	60' and 50' direct embedded steel poles, cross arms, drop cables and distribution box	18	TBD
Foundation Design		2	Completed
Installation		1	2-3 weeks
Controls	Air Mesh Hub	2	2 weeks
Project Management		1	

Additional items for consideration:

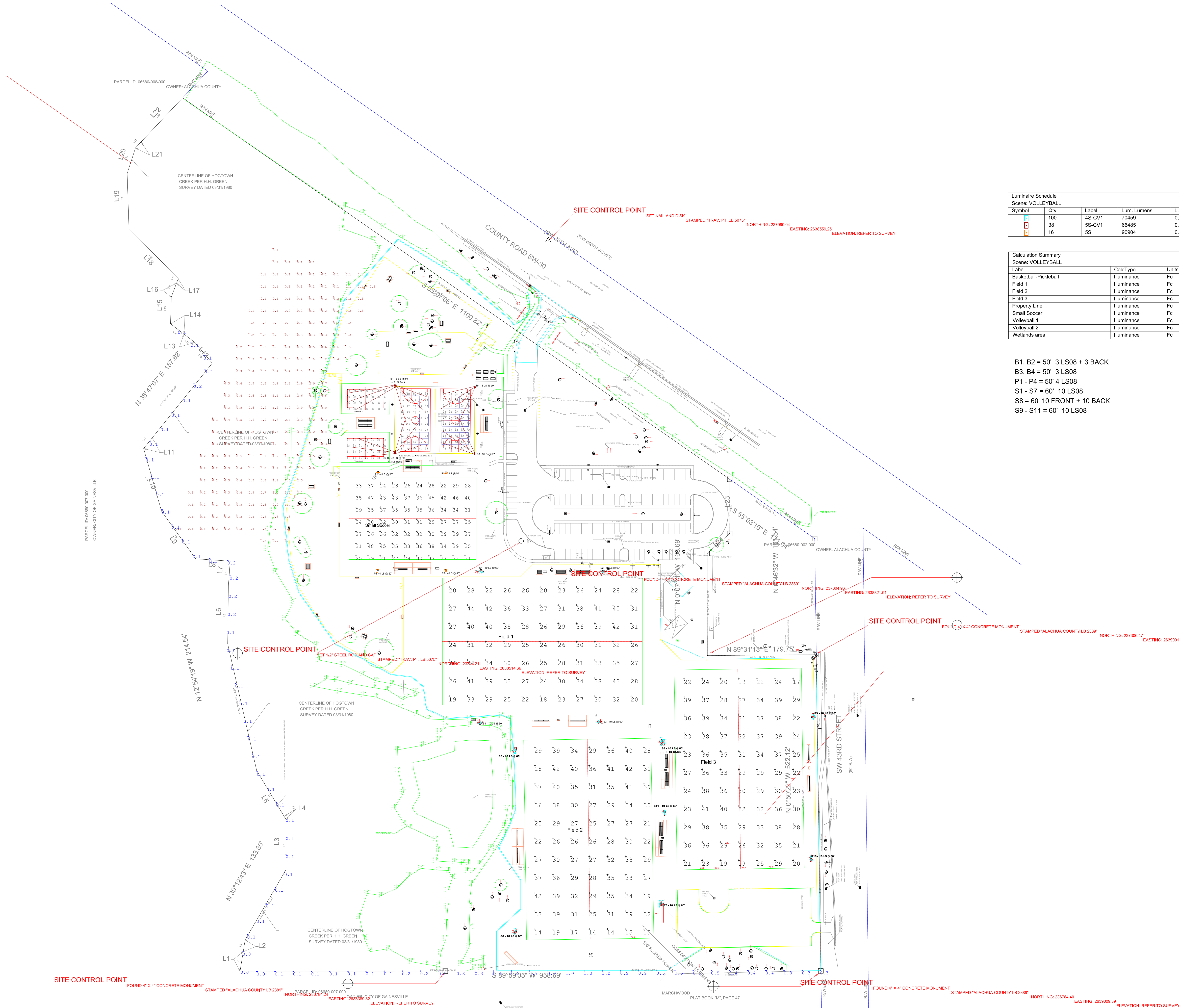
- The poles have been sized to 150 mph AASHTO 2013 building code requirements, if there is another specified building code a change order may be required.
- One (1) AirMesh Hub(s) included. The HUB can be installed anywhere you need with wireless, push-button control. The hub does not require LAN connection or cellular network for local communication.
- To operate the lights, *when not on the premises*, remote connectivity to the HUB is required via Ethernet or cellular service. This is accomplished with a remote management service called Simply Snap Cloud is necessary, which requires a yearly subscription including cell service. **3 Year Pricing = \$7,200 / Annual Pricing = \$2,800**

Important Notes/Terms and Conditions – **PLEASE READ**

- ✓ The schedule will be developed upon receipt of the order with our customer by a Senior Project Manager dedicated to your project success
- ✓ Price includes delivery to Jobsite using standard shipping methods, additional methods are available, and we would be happy to provide you with a quote for alternate methods
- ✓ Payment Terms in accordance with prompt payment: 50% at time non cancelable material ordered; 35%, when sports light material ships, 15% when sports lights are installed
- ✓ Does not include sales or use tax
- ✓ **Permitting or other local ordinance project-related fees are omitted**

Please sign in acceptance of our offer. The acceptance is contingent upon the City Commission approving the project.

X _____ Date _____



Luminaire Schedule							
Scene: VOLLEYBALL							
Symbol	Qty	Label	Lum. Lumens	LLF	Description	Lum. Watts	Total Watts
□	100	4S-CV1	70459	0.950	EPH-LS-08-0640L-57-70-4S-CV1	697	69700
□	38	5S-CV1	66485	0.950	EPH-LS-08-0640L-57-70-5S-CV1	697	26486
□	16	SS	90904	0.950	EPH-LS-08-0640L-57-70-SS	681	10896

Calculation Summary									
Scene: VOLLEYBALL									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	CV	UG
Basketball-Pickleball	Illuminance	Fc	44.54	55	31	1.44	1.77	0.14	1.42
Field 1	Illuminance	Fc	30.01	45	18	1.67	2.50	0.21	1.91
Field 2	Illuminance	Fc	30.47	42	14	2.18	3.00	0.24	2.60
Field 3	Illuminance	Fc	30.12	41	17	1.77	2.41	0.21	1.78
Property Line	Illuminance	Fc	0.24	1.0	0.0	N.A.	N.A.	N.A.	N.A.
Small Soccer	Illuminance	Fc	32.97	48	22	1.50	2.18	0.18	1.91
Volleyball 1	Illuminance	Fc	28.71	41	17	1.59	2.41	0.24	1.41
Volleyball 2	Illuminance	Fc	30.75	46	19	1.62	2.42	0.25	1.44
Wetlands area	Illuminance	Fc	0.96	6.4	0.1	9.60	84.00	N.A.	N.A.

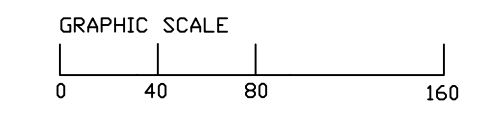
B1, B2 = 50' 3 LS08 + 3 BACK
 B3, B4 = 50' 3 LS08
 P1 - P4 = 50' 4 LS08
 S1 - S7 = 60' 10 LS08
 S8 = 60' 10 FRONT + 10 BACK
 S9 - S11 = 60' 10 LS08

Scene/Channel Summary	
Channel	# Lums
BASKETBALL	12
FIELD 1	40
FIELD 2	40
FIELD 3	40
SMALL SOC	16
VOLLEYBALL	6

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.


NEVER GIVE UP.
 Passion and Commitment exclusively for Ephesus LED Sports Lighting

FOREST PARK
 GAINESVILLE, FL
 ALL FIELDS AND PROPERTY LINES
 NEW SITE PLAN, CHANGE TO B POLES
 FIELDS @ 30 FC, COURTS @ 40 FC



DESIGNED BY H. JOHNSON, LC	DATE 10/26/2022	SCALE 1" = 80'	DRAWING NUMBER LD21304J
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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

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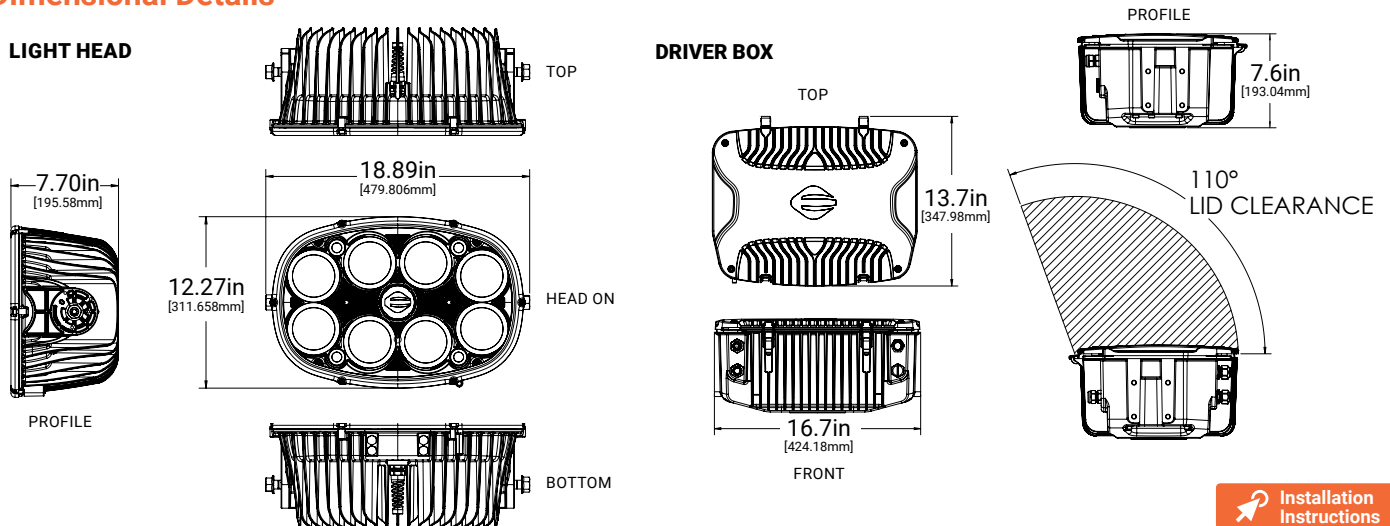
Product Certification



Top Product Features

- 55,000 or 90,000 lumen output options
- Glare and cutoff control via Hybrid Reflector and TIR Optical System
- Reduce install time with pre-aimable two-piece assembly
- Virtually eliminate maintenance with power redundancy
- Industry leading light source reliability with Chip-on-Board LEDs
- Greater than 92% lumen maintenance at 55,000 hours
- Wireless AirMesh, Wired DMX or sACN controls options to suit your needs
- [Impact Resistant Glass](#) option protects from vandalism and prevents down time in the event of impact to the glass.

Dimensional Details



[Installation Instructions](#)

Order Information

NOTE: A complete fixture order requires a selection entry for **Brand, Family, Model, Power Configuration, Color, CCT, CRI, Optic, Light Head Cable (DC), Voltage, Control, Mount Configuration, Power Cable (AC), Options, Packaging, & International Option.**

SAMPLE ORDER NUMBER: EPH-LS-08-0320L-BLK-40-70-1S-C04-HV-LB-LY-A00-HEG-BP-ST

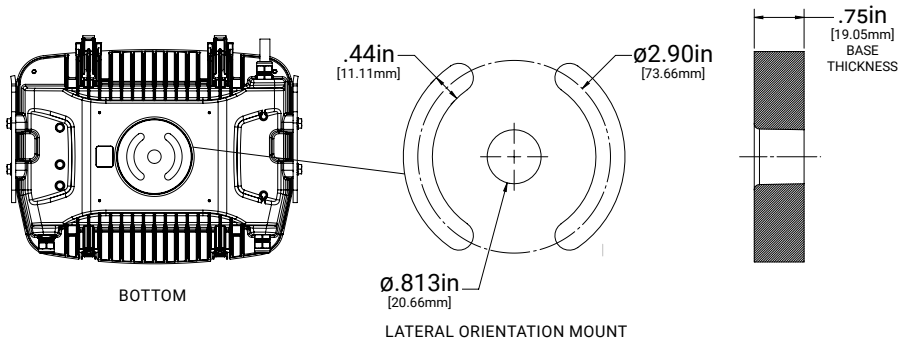
Brand	Family	Model	Power Configuration	Color	CCT	CRI	Optic	Light Head Cable (DC)
EPH = Ephesus	LS = Lumasport	08 = 8 Optics	0320L = 320W Local Power ¹ 0640L = 640W Local Power ¹	BLK = Black WHT = White	40 = 4000K 50 = 5000K 57 = 5700K	70 = 70 CRI 80 = 80 CRI	1S = NEMA 3 17.5 33.3 2S = NEMA 3 21.9 40.2 3S = NEMA 3 25.4 45.7 4S = NEMA 4 36.0 64.4 5S = NEMA 5 46.6 82.6 7F* = NEMA 7 72.5 131.0	C04 = 4ft Cable, Standard C10* = 10ft Cable, Catwalk Bracket
			Notes: (1) Local Power means that the light head is attached to the driver box with the yoke or pendant mount.	Notes: (2) Not coastal rated. Contact Ephesus for coastal fixture options.			Notes: (3) Optic = NEMA TYPE; BEAM ANGLE; FIELD ANGLE. Additional optical performance data within spec sheet. (4) 7F = NEMA 7 Optic only available with 0320L = 320W Local Power configuration.	Notes: (5) DC Cable connecting the light head to the driver box. (6) C10 = 10ft Cable is intended to be used with the Ephesus Catwalk Bracket

Voltage	Control	Mount Configuration	Power Cable (AC)	Options	Packaging	International Option
LV = Low Voltage HV = High Voltage	NC = No Control AM = Wireless AirMesh LB = Wired DMX	LY = Local Yoke LP = Local Pendant	A00 = No Cable, Standard A04 = 4ft Cable A10 = 10ft Cable A15 = 15ft Cable	HEG = No Visor High Efficiency Glass Lens VHE = Visor High Efficiency Glass Lens IRG = No Visor Impact Resistant Glass Lens VIR = Visor Impact Resistant Glass Lens	BP = Bulk Pack	ST = Standard
			Notes: (7) AC Cable connecting the Driver Box to the electrical power source.			

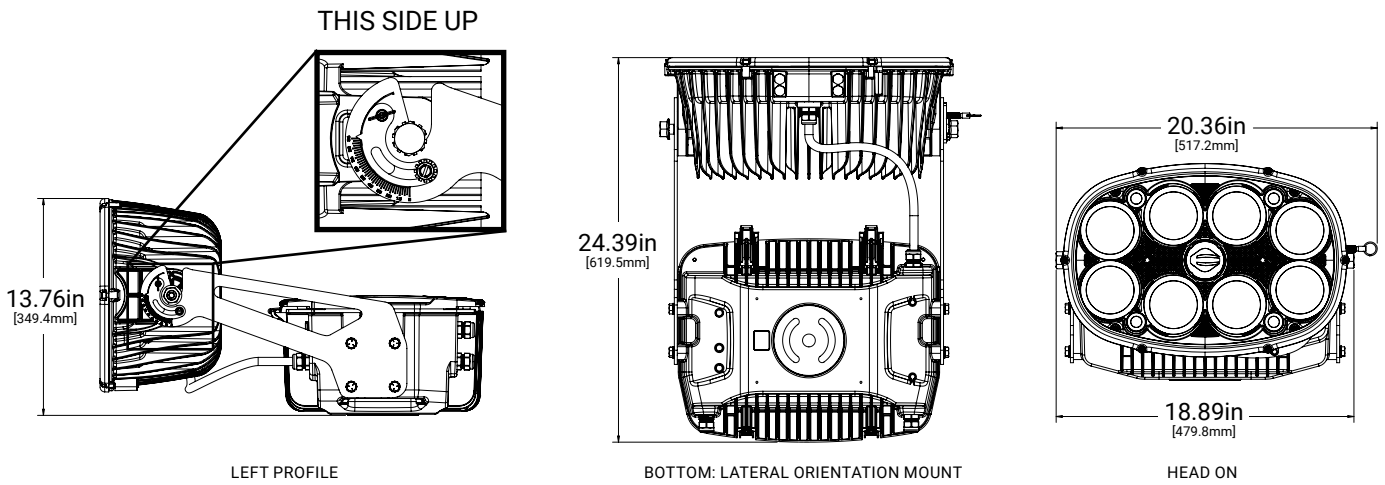
DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details

Dimensional and Mounting Details

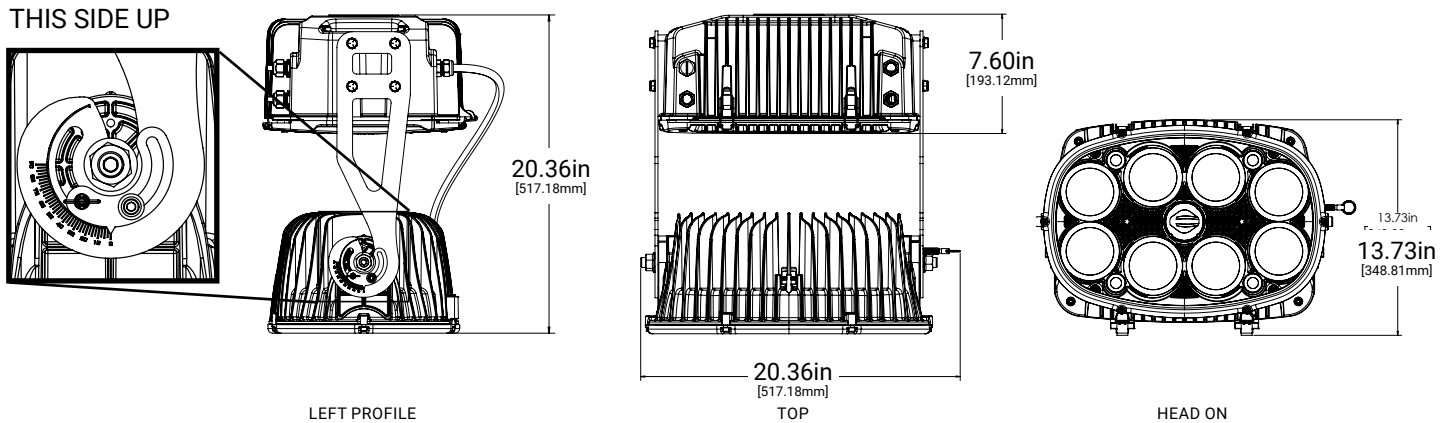
MOUNTING: DRIVER BOX



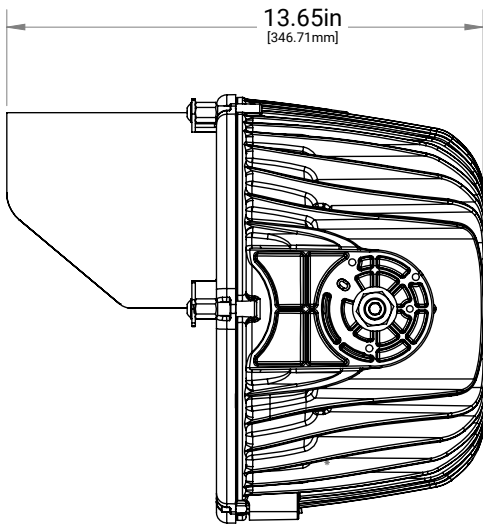
MOUNTING CONFIGURATION: LOCAL YOKE



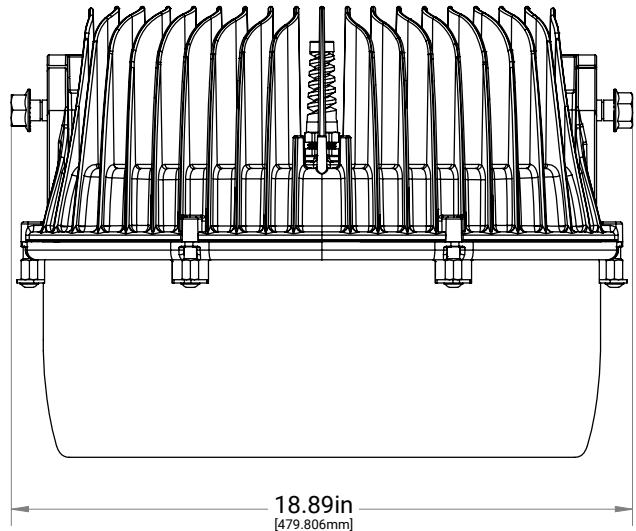
MOUNTING CONFIGURATION: LOCAL PENDANT



VHE & VIR Visor Option



LEFT PROFILE: VISOR



TOP: VISOR

NOTES:

The addition of a visor adds 1lb of material to the luminaire weight.

Performance Data¹

	LUMASPORT 8 (320W)	LUMASPORT 8 (640W)
Lumen Output Range ²	48,303 - 55,419lm	80,572 - 92,929lm
Nominal Power ³	340W	680W
Input Voltage (Low Voltage)	120-277VAC	120-277VAC
Input Voltage (High Voltage)	347-480VAC	347-480VAC
Efficacy Range ²	140.4 - 163.5 lm/W	117.5 - 139.3 lm/W
CRI ⁴	70, 80	70, 80
TLCI ⁵	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 ⁶	INDOOR, OUTDOOR ⁶
Mounting Options (3G RATED)	LOCAL YOKE; LOCAL PENDANT	LOCAL YOKE; LOCAL PENDANT
Electrical Certifications	FCC, UL8750, UL1598, DLC Standard (NANQSV)	FCC, UL8750, UL1598, DLC Standard (NANQSV)
Environmental Certifications	ANSI C136.31-2010 3G, IP66, NEMA4X ⁷	ANSI C136.31-2010 3G, IP66, NEMA4X ⁷
Surge	10kV	10kV
Effective Projected Area (EPA)	1.8 (sq. ft.)	1.8 (sq. ft.)
Effective Projected Area (EPA) with Visor (VHE) ⁸	1.8 - 2.5 (sq. ft.)	1.8 - 2.5 (sq. ft.)
Approximate Weight ⁹	67.5 LBS	71.5 LBS

NOTES:

- (1) Specifications are subject to change without notice.
- (2) Refer to Optical Performance Data.
- (3) Values are +/- 4% when fixture is operated at 25°C ambient
- (4) Values are +/- 2%
- (5) Values are +/- 3 points.
- (6) When driver box is mounted in upright position.
- (7) Light head meets NEMA4X Certification
- (8) EPA may vary depending on the aiming angle of the fixture.
- (9) Weight may vary depending on mounting bracket, VHE Visor option, light head and driver box selection.

Electrical Performance Data

Product	Input Voltage Range (VAC)	Nominal Input Power (W)	Input Current (A)	Power Factor (>60% Load)	THD (>60% Load)	Inrush (A2s)	Inrush period (ms)	Peak Inrush (A)
LS-8-320	120-277	340 (365 Max)	1.3 - 3.0 (4.0 Max)	> 0.9	< 20%	1.9	3.52	150
	347-480	340 (365 Max)	0.7 - 1.0 (1.5 Max)	> 0.9	< 20%	3.87	1.77	70
LS-8-640	120-277	680 (740 Max)	2.5 - 5.9 (8.0 Max)	> 0.9	< 20%	3.8	3.52	300
	347-480	680 (740 Max)	1.5 - 2.0 (3.0 Max)	> 0.9	< 20%	7.74	1.77	140

Project		Catalog #		Type	
Prepared by		Notes		Date	



Ephesus

LUMAVISION

White LED Sports & Entertainment Luminaire

Typical Applications

- Aerial and Ground Sports Venues • Multi-Event Centers
- Gymnasiums & Field Houses • Outdoor Courts • Basketball Courts
- Tennis Courts • Pickleball Courts • Volleyball Courts • Playgrounds & Skateparks
- Parks and Recreation Venues • Ice Hockey & Skating Arenas

Product Certification



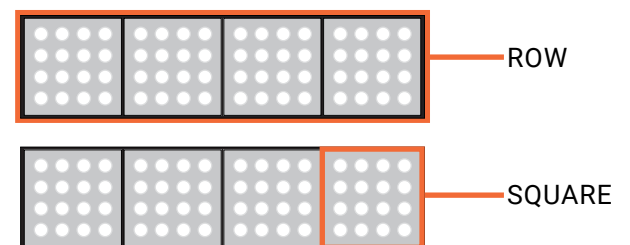
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Top Product Features

- **Optical Performance**
 - **AccuLED Optics™:** LumaVision utilizes patented and industry leading UV coated AccuLED Optics™ preventing yellowing and degradation over time.
 - **Glare and Spill Light Control:** Nineteen (19) available beam distributions provide the flexibility and performance required for indoor and outdoor sports lighting.
 - **Dark Sky Compliance Capable:** Light your game for the players and the community
- **Reliability**
 - **Built To Perform:** Thermally managed driver and LED housing provides demonstrated reliability confidence.
 - **L90:** With a 90,000+ hour rated life (at greater than 90% lumen maintenance), the LumaVision LED luminaire is designed for long life.
- **Take Control of Your System**
 - Compatible with the Ephesus control ecosystem, putting the control of your system in the palm of your hand.
- **Ease of Installation**
 - 6 flexible indoor/outdoor mounting options
- **Customizable**
 - 7 factory custom color options.
- **Accessories**
 - Custom visors provide additional cutoff and spill light control. Sport specific impact resistance technologies reduce maintenance on the system.

Product Model Terminology



Model Name	Description
LumaVision 3	1 Row, 3 Squares
LumaVision 4	1 Row, 4 Squares
LumaVision 6	2 Rows, 6 Squares
LumaVision 7	2 Rows, 7 Squares
LumaVision 8	2 Rows, 8 Squares

Installation Manual

Performance Data¹

	LumaVision 3	LumaVision 4	LumaVision 6	LumaVision 7	LumaVision 8
Nominal Lumen Output (at 70 CRI)²	28000	36000	55000	59000	58000
Nominal Lumen Output (at 90 CRI)³	20200	26200	39700	42300	41800
Nominal Power⁴	232	304	464	532	488
Voltage Range (Low)	120-277VAC				
Voltage Range (High)	347 - 480VAC				
Efficacy (lm/W)	121	119	119	111	119
CRI⁵	70, 90 CRI				
TLCI (at 90 CRI)⁵	92				
CCT Range (at 70 CRI)	3000-6000K				
CCT Range (at 90 CRI)	3000-5000K				
Distribution (NEMA)	Refer to Order Information on page 3 for optic options				
Dimming Range	10%-100%				
Operating Temperature Range	-40°C to +40°C				
Usage	INDOOR, OUTDOOR				
Electrical Certifications	FCC Part 15, UL8750, UL1598, DLC STANDARD				
Environmental Certifications	IP66; ANSI C136.31-2010, RoHS				
Surge	6kV, 10kV (option), 20kV (option)				

Luminaire Approximate Weight ⁶	LumaVision 3	LumaVision 4	LumaVision 6	LumaVision 7	LumaVision 8
With Yoke Weight (LBS)	24.25	26.44	45.93	50.58	50.58
With Pendant (LBS)	24.48	26.28	42.16	45.31	45.31
With Slipfitter (LBS)	27.8	29.98	45.53	46.49	46.49

Mount Vibration Rating Per ANSI C136.31-2010

YOKE = Yoke (Standard)	3G
PNDT = Pendant	N/A
AAJL = Adjustable arm direct pole mount	3G
AAJC = Adjustable arm direct pole (cord through housing)	3G
ADJL = Slipfitter (Leads through slipfitter)	3G
ADJC = Slipfitter (Cord through housing)	3G

Effective Projected Area (EPA) ⁷ *	LumaVision 3	LumaVision 4	LumaVision 6	LumaVision 7	LumaVision 8
YOKE = Yoke (Standard)	1.61 (sq. ft.)	1.64 (sq. ft.)	2.38 (sq. ft.)	2.78 (sq. ft.)	2.78 (sq. ft.)
PNDT = Pendant	1.6 (sq. ft.)	1.89 (sq. ft.)	2.34 (sq. ft.)	2.9 (sq. ft.)	2.9 (sq. ft.)
AAJL = Adjustable arm direct pole mount	1.8 (sq. ft.)	1.8 (sq. ft.)	1.8 (sq. ft.)	1.8 (sq. ft.)	1.8 (sq. ft.)
AAJC = Adjustable arm direct pole (cord through housing)	1.8 (sq. ft.)	1.8 (sq. ft.)	1.8 (sq. ft.)	1.8 (sq. ft.)	1.8 (sq. ft.)
ADJL = Slipfitter (Leads through slipfitter)	1.77 (sq. ft.)	2.04 (sq. ft.)	2.47 (sq. ft.)	2.99 (sq. ft.)	2.99 (sq. ft.)
ADJC = Slipfitter (Cord through housing)	1.77 (sq. ft.)	2.04 (sq. ft.)	2.47 (sq. ft.)	2.99 (sq. ft.)	2.99 (sq. ft.)

NOTES:

- (1) Specifications are subject to change without notice
- (2) Based on T4FT lens, 70 CRI, 5000K
- (3) Based on 66 lens, 70 CRI, 5000K
- (4) Values are +/- 5% when fixture is operated at 25°C ambient
- (5) Values are +/- 3 points
- (6) Weight varies depending on mounting bracket, lighthouse and driverbox selection
- (7) Calculated with luminaire aimed 45° to the ground
- (8) EPA varies depending on the aiming angle of the fixture

Order Information -

NOTE: A complete fixture order requires a selection entry for **Brand, Family, Model, Drive Current, Voltage, Color, Trim Option, Mount, CRI/CCT, Optic, Control, AC Whip, Surge Options, Construction Options.**

SAMPLE ORDER NUMBER: EPH-VN-08-D-HV-AP-WHT-YOKE-930-11-010-A07-NN-ST

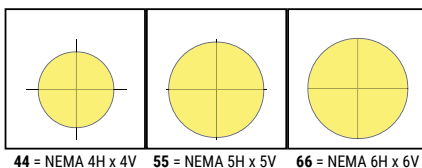
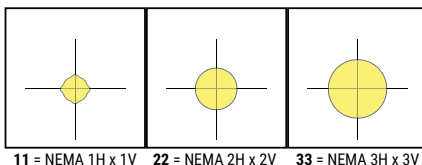
Brand	Family	Model	Drive Current	Voltage	Color	Trim Option	Mount
EPH = Ephesus	VN = LumaVision	03 = 3 Light Squares ¹ 04 = 4 Light Squares ¹ 06 = 6 Light Squares ² 07 = 7 Light Squares ² 08 = 8 Light Squares ²	D = 1200 mA ³ (8 light square model) E = 1500 mA ⁴ (3, 4, 6, 7 light square models)	HV = High Voltage LV = Low Voltage	AP = Grey (Standard) BK = Black BZ = Bronze WH = White GR = Green GM = Graphite Metallic DP = Dark Platinum	WHT = White (Standard) LCF = Trim painted to match color ⁵	YOKE = Yoke (Standard) ⁶ PNDT = Pendant AAJL = Adjustable arm direct pole mount ⁶ AAJC = Adjustable arm direct pole (cord through housing) ⁶ ADJL = Slipfitter (Leads through slipfitter) ^{6 7} ADJC = Slipfitter (Cord through housing) ^{6 7}
Notes:	Notes:	Notes: (1) Single Bar Configuration (2) Double Bar Configuration	Notes: (3) Standard for 8 light square model, available as reduced drive current option for 3,4,6,7 models with HA or HSS (4) Standard for 3,4,6,7 light square models	Notes: HV = 347-480 VAC LV = 120-277 VAC	Notes:	Notes: (5) LCF Not available with optical types 11, 22, 33, 44, 55, 66	Notes: (6) 3G Vibration Rated Per ANSI C136.31-2010 (7) Slipfitter mount to fasten luminaire to a 3 inch outer diameter tenon size.

CRI/CCT	Optic	Control	AC Whip	Surge Options	Construction Options
730 = 70CRI, 3000K 735 = 70CRI, 3500K 740 = 70CRI, 4000K 750 = 70CRI, 5000K 760 = 70CRI, 6000K 930 = 90CRI, 3000K 935 = 90CRI, 3500K 940 = 90CRI, 4000K 950 = 90CRI, 5000K	11 = NEMA 1H x 1V ⁸ 22 = NEMA 2H x 2V ⁸ 33 = NEMA 3H x 3V ⁸ 44 = NEMA 4H x 4V ⁸ 55 = NEMA 5H x 5V ⁸ 66 = NEMA 6H x 6V ⁸ T2 = Type II T2R = Type II Roadway T3 = Type III T3R = Type III Roadway T4FT = Type IV Forward Throw T4W = Type IV Wide 5NQ = Type V Narrow 5MQ = Type V Square Medium 5WQ = Type V Square Wide SL2 = Type II w/Spill Control SL3 = Type III w/Spill Control SL4 = Type IV w/Spill Control RW = Rectangular Wide Type I	010 = 0-10V (Standard) AMS = AirMesh DAL = DALI	NC = No Cord ¹⁰ A05 = 5ft whip A07 = 7ft whip (Standard) A10 = 10ft whip A15 = 15ft whip	NN = None (Standard) 10MSP = Parallel 10kV MOV Surge Protective Device 20MSP = Parallel 20kV MOV Surge Protective Device	ST = Standard HA = 50°C High Ambient ¹² CC = Coastal Construction finish HSS = House Side Shield ^{12 13}
Notes:	Notes: (8) Optic only available with CRI/CCT 930, 935, 940, 950.	Notes: 010 = 5C/16 BLK Cord AMS = 3C/16 BLK Cord DAL = 5C/16 BLK Cord	Notes: (9) AC Whip connecting the Driver Box to the electrical power source. (10) Applies to ADJL & AAJL Mounting Types only	Notes: (11) Contact ephesus for additional protection options.	Notes: (12) Can not be used with drive current type E = 1500mA (13) Not available with optical types 22, 33, 44, 55, 66, 5NQ, 5MQ, 5WQ & RW

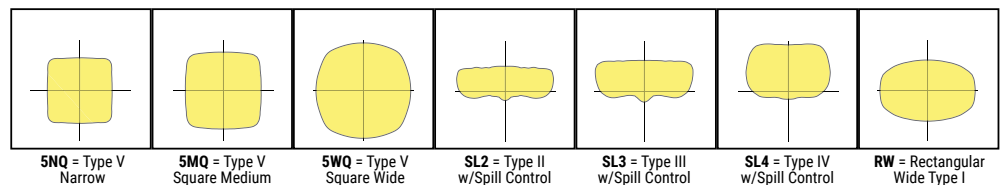
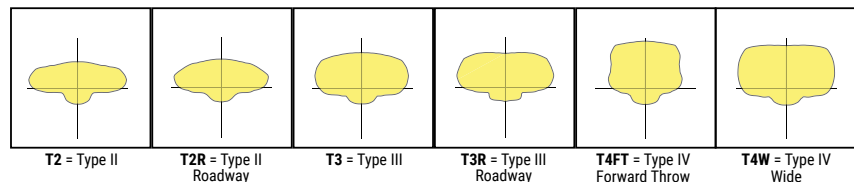
DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details

LUMAVISION AccuLED Optics™

Symmetrical



Asymmetrical



Project		Catalog #		Type	
Prepared by		Notes		Date	



Ephesus

AirMesh Hub

Wireless Lighting System Controls

Typical Indoor/Outdoor Applications

- Professional Stadiums & Arenas • University/Collegiate Stadiums & Arenas
- K-12 Stadiums & Arenas • Game Fields • Practice Fields • Multi-use Recreational & Municipal Fields • Public Assembly & Convention Centers
- Gymnasiums & Field Houses • Unmanned Sports Facilities

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- Dynamic Scenes [page 3](#)

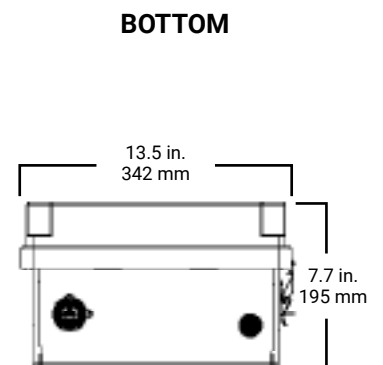
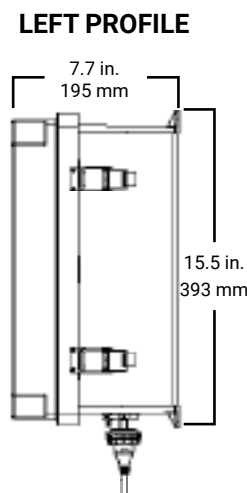
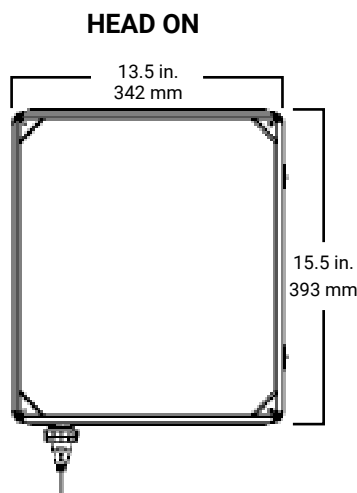
Product Certification



Top Product Features

- Can be installed anywhere you need wireless, push-button control
- Five-button, pre-programmed switch provides easy control of all lights at specified dimming levels (0%, 25%, 50%, 75%, 100%)
- Can communicate via LAN connection, Wi-Fi, or through a cellular network*
- Weather-protected for outdoor venues
- Includes internal surge protection
- Enables Static and Dynamic Scenes

Dimensional Details



Due to our continuous improvement efforts, specifications are subject to change without notice.
*Cellular and/or data charges may apply



Product Overview

The AirMesh Hub is an Ephesus component that can be installed anywhere you need wireless push-button lighting control, such as municipal ballparks, hockey arenas, basketball facilities, and other multi-use complexes. The AirMesh Hub is easy for certified electricians to install in both indoor and outdoor applications that's contained in the NEMA 4X enclosure. The 5-button 25 scenes (5 per button) controller allow for local manual access to facility lighting across specific zones or over the entire lighting installation. The AirMesh Hub enables quick and simple access to a switch station that can be programmed with unlimited options to meet the needs of the end-user.

AirMesh Hub Specifications

Dimensions	15.5" x 13.5" x 7.7" (393 x 342 x 195 mm)
Input Power	Outdoor rated power supply 90-120VAC; 8W max, 6kV surge protection
Operating Environment	Outdoor rated at -20°C to +55°C, IP65 (when latched)
Cellular	Verizon 4G LTE
Wi-Fi	802.11 b/g/n
Radio	SNAP 2.4GHz 802.15.4 Wi-Fi 2.4Ghz 802.11 b/g/n
Certifications	FCC/IC; Tested to CAN/CSA C22.2 No. 60950-1/A2:2014 and UL 60950-1/R:2014-10
Ratings	IP65 ^{1,2}

AirMesh Function

AirMesh Function	Description
Maximum number of lights controlled by hub	Up to 1000
Maximum distance of fixture from location of hub	500 feet
Maximum allowable distance from one fixture to next	500 feet
Maximum number of programmable pre-set scenes	25 (5 per button)
Individual light control	Preprogrammed via 5-button hub. Additional scenes and light control obtained via web interface with hub
Health monitoring³	Real-time monitoring of lighting status at the fixture and system level, outage notifications, storage of power consumption, temperature and other system parameters which can be retrieved for later analysis*
Remote Connectivity	Web interface can be accessed by direct Wi-Fi connection or through internet via Ethernet or built-in cellular*
Alerts	Email alerts available when connected to internet via Ethernet or built-in cellular*
Users	User and administrative accounts with multiple permission levels available
Sensors	Voltage-sourcing sensors can be added to the system to turn lights on/off with daylight or occupancy sensors. Multiple output levels in response to light sensors (daylight harvesting)
Map View	Ability to view light state (on/off/ alarm) in graphical map/satellite view
Scheduling	Ability to schedule recurring events at fixed times or based on astronomical clock
Compatibility	Ability to add control modules to existing lighting fixtures to add Air-Mesh functionality to entire facility

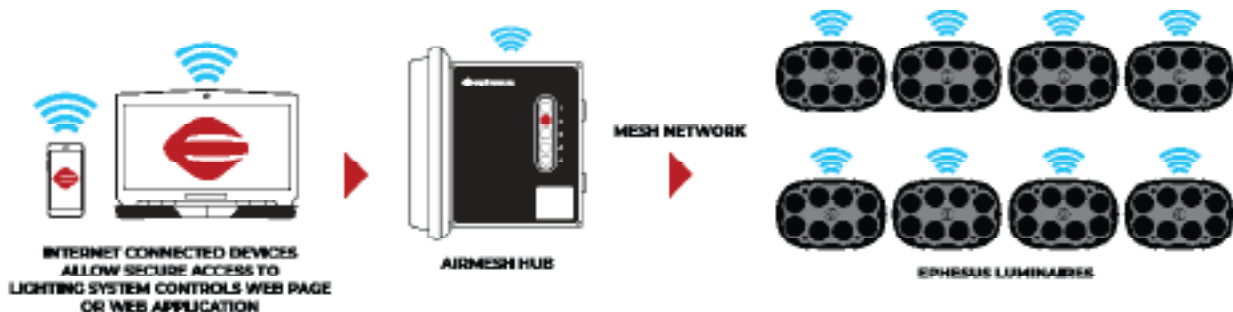
Notes:

Due to our continuous improvement efforts, specifications are subject to change without notice.
¹To maintain IP rating of the unit, it must be installed with a IP65/NEMA 4X fitting at the power and ethernet entry points
²The AirMesh Hub holds a rating of IP65 for outdoor when the door is latched and all entry ports (power and Ethernet) are properly sealed. Failure to properly seal entry ports and latch the door will void the IP65 rating.
³Refer to the functionality of your Ephesus fixture for health monitoring capability.

Example System Topology (Wireless AirMesh Controls)

Example system topology showing the LUMASPORT System in a Wireless AirMesh Control Installation.

Note: Laptop or mobile device not included. A cellular network connection requires a cellular carrier network plan.



AirMesh Dynamic Scenes

The AirMesh Hub control system can provide dynamic scenes and effects. You can easily create an unlimited combination of static scenes. For example, create scenes to spotlighting national anthems, player introductions, intermissions, blackout your venue, maintenance and egress lighting scenes.

Ephesus Fixture	Luminaire Type	Static Scenes	Dynamic Scenes
LUMASPORT 8 	White LED	<ul style="list-style-type: none"> • ON/OFF • Dim 10-100% • Blackout • Individual Light Fixture Control • Unlimited Programmable Static Scenes 	<ul style="list-style-type: none"> • Paparazzi [Standard & Fast] • Sparkle [Standard & Fast] • Random
LUMASPORT 16 	White LED	<ul style="list-style-type: none"> • ON/OFF • Dim 10-100% • Blackout • Individual Light Fixture Control • Unlimited Programmable Static Scenes 	<ul style="list-style-type: none"> • Paparazzi [Standard & Fast] • Sparkle [Standard & Fast] • Random
PRISM RGBA 	RGBA Color LED	<ul style="list-style-type: none"> • ON/OFF • Dim 0-100% • RGBA Color Mixing • Blackout • Individual Light Fixture Control • Unlimited Programmable Static Scenes 	<ul style="list-style-type: none"> • Paparazzi With Color [Standard & Fast] • Pinwheel With Color • Pinwheel 5 With Color • Sparkle With Color [Standard & Fast] • Random With Color
ALL FIELD 	White LED	<ul style="list-style-type: none"> • ON/OFF • Dim 0-100% • Blackout • Individual Light Fixture Control • Unlimited Programmable Static Scenes 	<ul style="list-style-type: none"> • Paparazzi Standard & Fast] • Pinwheel • Pinwheel 5 • Sparkle [Standard & Fast] • Random
LUMADAPT 8 	Integrated White / RGBA Color LED	<ul style="list-style-type: none"> • ON/OFF • Dim 0-100% • RGBA Color Mixing • Color Temperature (CCT) Tuning • Beam Angle Tuning • Blackout • Individual Light Fixture Control • Unlimited Programmable Static Scenes 	<p>White & RGBA Light</p> <ul style="list-style-type: none"> • Paparazzi [Standard & Fast] • Sparkle [Standard & Fast] • Random



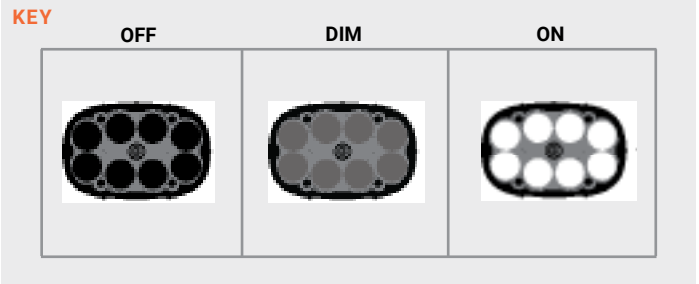
LUMASPORT 8

Dynamic Scenes

White LED

Lumen(lm) Output:

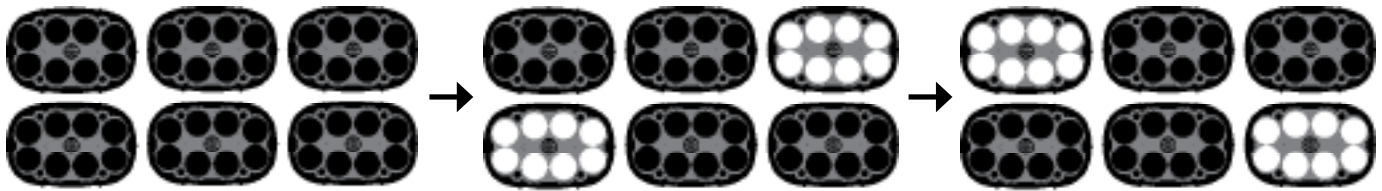
55,000 & 90,000



Paparazzi [Standard & Fast]¹

Each light illuminates briefly in a random manner that resembles paparazzi flash bulbs.

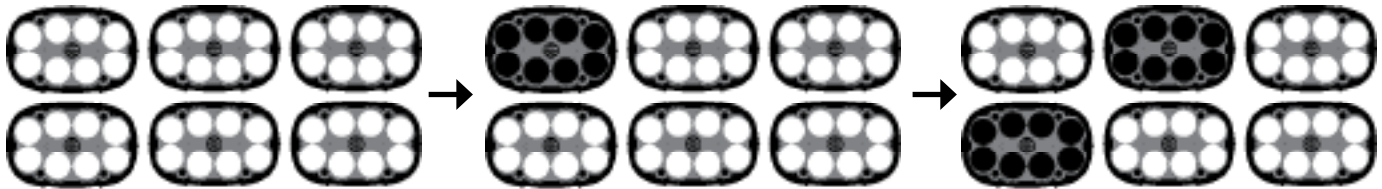
When entering this mode, all fixtures will immediately turn **OFF**. Fast paparazzi fires faster than standard paparazzi.



Sparkle [Standard & Fast]²

Each light illuminates briefly in a random manner mimicking a glittery, sparkling appearance.

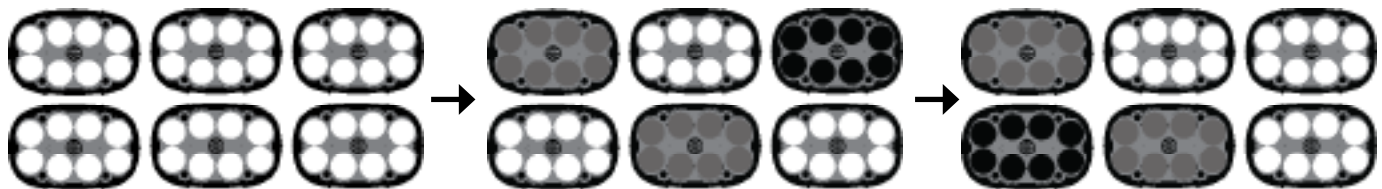
When entering this mode, all fixtures will immediately turn **ON**. Fast Sparkle fires more rapidly than standard sparkle.



Random

Lights illuminate throughout the installation in a random manner.

All fixtures will immediately turn **ON** to a random dimming level between 0 and 100%. Every 100 milliseconds, each fixture will change to another random dimming level.



Unless otherwise stated for a particular scene affects independently and the scene will remain in operation until another scene or mode of operation is selected.

¹For each flash period, a light will have a 10% chance of turning on under Paparazzi, and a 20% chance under Fast Paparazzi. For each flash period, a light will have a 10% chance of turning on under Paparazzi, and a 20% chance under Fast Paparazzi.

²For each flash period, a light will have a 10% chance of turning on under Sparkle, and a 20% chance under Fast Sparkle.