



# AEROPRO

High Performance, Full Cutoff  
Sports Lighting

Vertical Burn Pulse-Start Metal Halide Technology



by LSI Courtsider Sports Lighting

# AEROPRO — IMPROVING THE GAME THROUGH INNOVATION

The game has changed! Introducing the new **AeroPro by LSI Courtsider Sports Lighting**. The AeroPro combines the science of vertical burn design innovation with high-performance reflector technology to create the most advanced and effective tennis court lighting system available today. In a class by itself, the new AeroPro represents the perfect fusion of lighting technology and experience.



LSI Courtsider Sports Lighting is committed to providing community-friendly lighting that delivers high quality, energy efficient illumination while eliminating unnecessary uplight and minimizing light trespass. The AeroPro is considered to be community-friendly, meeting IES full cutoff classification.

## **Advancements Through Innovation**

- Greater ball visibility and clarity
- Superior, uniform surface illumination
- Glare-free visual comfort
- 45% more light output than conventional fixtures
- Improved lumen depreciation over time – as much as 40%
- Better performance at a lower overall cost – higher light levels, fewer fixtures and poles, longer lamp life and less energy consumption
- Superior sharp cutoff functionality—non-intrusive, good neighbor and dark skies friendly

Due to the additional light output produced by the AeroPro, it is especially suited for facilities with higher levels of competition. That would include university, college and tournament courts. Using less AeroPro fixtures, it would also be suitable for resorts and country clubs. Sporting an attractive profile, the distinctively styled AeroPro by LSI is as flexible as it is functional.



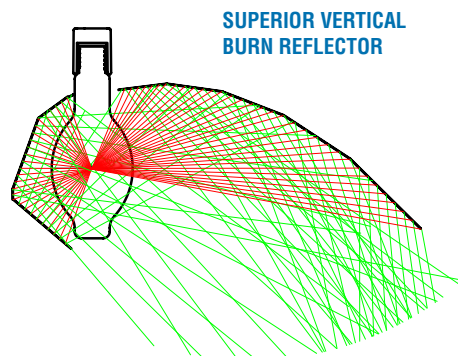
## SERVING UP A BETTER QUALITY OF LIGHT

### **Advantages of Vertical Burn – Total Lighting Uniformity**

- Reflector completely surrounds vertically positioned lamp to control light output and maximize light distribution
- Vertical burn lighting eliminates hot spots while improving visibility and efficiency over horizontal burn fixtures
- Maximizes lamp life – lowers maintenance and lamp costs
- Requires fewer fixtures (lower overall costs)

### **Pulse-Start Metal Halide – High Performance & Efficiency**

- Delivers the white light of metal halide along with improved energy efficiency and lumen depreciation
  - Available in 750, 775, 875, and 1000 watt versions
  - More lumens per watt (greater efficiency)
  - Longer lamp life
  - Improved lumen depreciation by as much as 40%
  - Faster warm-up and quicker restrike
  - Improved color rendering for greater ball clarity

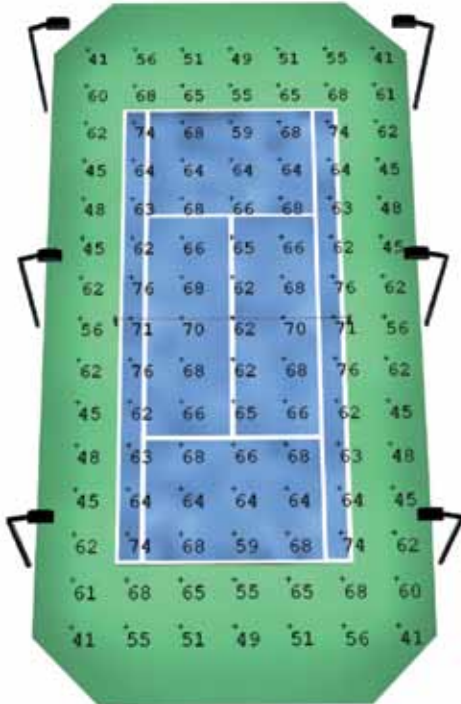


The advanced vertical burn reflector has been engineered to drive light forward and laterally while redirecting any potential rays that may contribute to backlight. This design also minimizes light levels directly below the luminaire which increases overall uniformity of illumination. The modular drop-in reflector assembly is constructed of highly specular (95%) anodized aluminum segments. Photometric performance is verified by Independent Testing Laboratories Inc. (ITL).

# STANDARD LAYOUTS — CREATE YOUR BEST GAME PLAN

## AEROPRO / 6 FIXTURES PER COURT

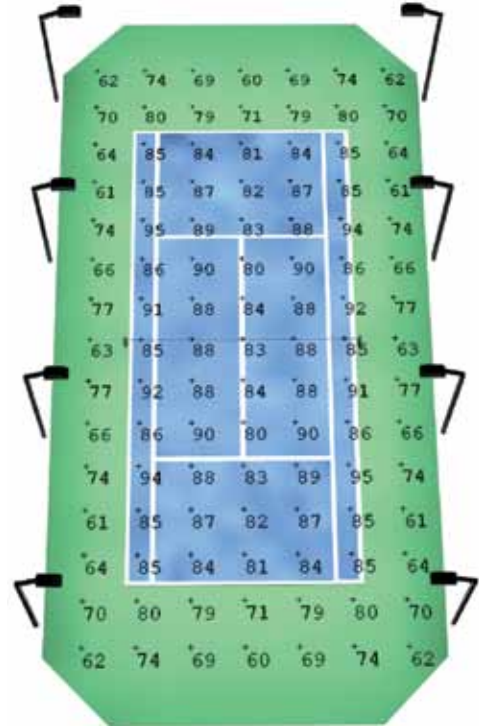
- 1000W Pulse Start Metal Halide
- 120,000 Initial Lumens
- 26' Mounting Height
- 0.90 Light Loss Factor\* (LLF)



Primary Playing Area (PPA) Initial Average – 61 footcandles (657 lux)  
 Court Boundary Area (CBA) Initial Average – 64 footcandles (689 lux)  
 PPA Max:Min – 1.83  
 CBA Max:Min – 1.28  
 PPA Coefficient of Variation (CV) – .015  
 CBA Coefficient of Variation (CV) – 0.05  
 PPA Uniformity Gradient (UG) – 1.46  
 CBA Uniformity Gradient (UG) – 1.21

## AEROPRO / 8 FIXTURES PER COURT

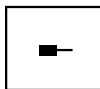
- 1000W Pulse Start Metal Halide
- 120,000 Initial Lumens
- 26' Mounting Height
- 0.90 Light Loss Factor\* (LLF)



Primary Playing Area (PPA) Initial Average – 79 footcandles (850 lux)  
 Court Boundary Area (CBA) Initial Average – 83 footcandles (893 lux)  
 PPA Max:Min – 1.58  
 CBA Max:Min – 1.16  
 PPA Coefficient of Variation (CV) – .013  
 CBA Coefficient of Variation (CV) – 0.04  
 PPA Uniformity Gradient (UG) – 1.22  
 CBA Uniformity Gradient (UG) – 1.11

*\*Light Loss Factors (LLF) are used to adjust lighting calculations from a controlled laboratory environment to actual field conditions. All light levels shown are initial horizontal footcandles at 3' above the court.*

## CONFIGURATIONS



- Single – APR-A Assembly**
- (1) 1000 Watt Fixture
  - (1) Single Bracket
  - (1) Pole Top Hub
  - (1) 5" O.D. Pole



- D180 – APR-B Assembly**
- (2) 1000 Watt Fixture
  - (2) Single Bracket
  - (1) Pole Top Hub
  - (1) 5" O.D. Pole



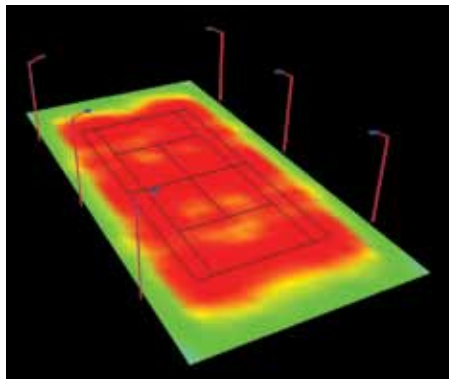
- D70 – APR-C Assembly**
- (2) 1000 Watt Fixture
  - (2) Single Bracket
  - (1) Pole Top Hub
  - (1) 5" O.D. Pole



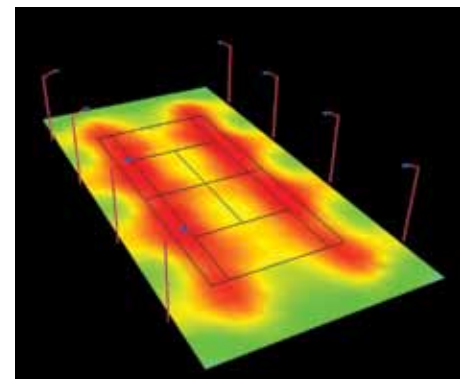
- Q90 – APR-D Assembly**
- (4) 1000 Watt Fixture
  - (4) Single Bracket
  - (1) Pole Top Hub
  - (1) RTP Pole

A reduced number of lighting fixtures means increased cost-savings, optimized playing conditions and fewer spectating obstacles. The AeroPro's court-illuminating superiority is demonstrated by radiosity analysis that illustrates the lighting uniformity and intensity of a six-pole pulse-start metal halide vertical-burn fixtures compared to a traditional eight-pole configuration with horizontal-burn fixtures.

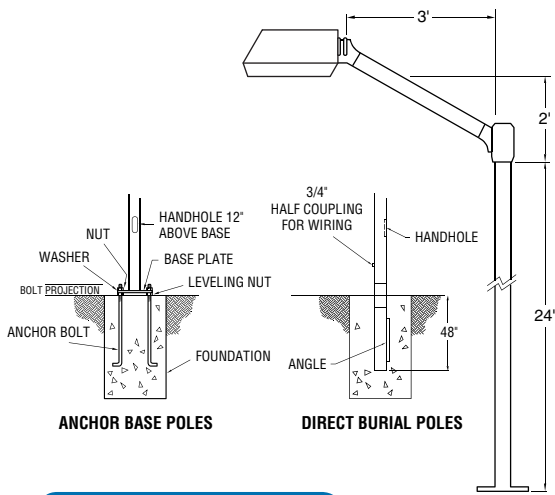
### NEW PULSE-START METAL HALIDE VERTICAL BURN



### TRADITIONAL HORIZONTAL BURN



# POLE AND BRACKET SPECIFICATIONS



- Single pole shafts are electro-welded ASTM-A500 5" O.D. 11 Ga. round straight steel tubing.
- Twin 180 and 70 pole shafts are electro-welded ASTM-A500 5" O.D. 7 Ga. round straight steel tubing.
- Quad pole shafts are ASTM-A595 11 Ga. round tapered steel tubing.
- 5" O.D. 11 Ga. round straight steel tubing is approximately 7 lbs. per ft.
- 5" O.D. 7 Ga. round straight steel tubing is approximately 10 lbs. per ft.
- Round tapered 11 Ga. steel tubing is approximately 8 lbs. per ft.
- Anchor base poles are furnished with galvanized anchor bolts and zinc plated double nuts and washers. Anchor bolts conform with ASTM F1554-07a Grade 55 with a minimum yield strength of 55,000 PSI.
- Bases are ASTM-A36 hot-rolled steel plate with a minimum yield strength of 36,000 PSI.
- 5" O.D. 11 & 7 Ga. round straight poles have 3" x 6" reinforced handhole 12" above base plate; cover is provided.

- Round tapered poles have 4" x 6" reinforced handhole 12" above base plate; cover is provided.
- Ground lug is standard.
- Weatherproof ground fault circuit interrupter is optional.
- Two-piece fabricated aluminum base cover is standard for anchor base poles.
- Pole top hub externally slip fits pole. Hardware to level bracket is internally threaded, concealing it from view for cleaner appearance. A through bolt is not required.
- Extension arm is ASTM-A500 4" O.D. round steel tubing.

EPAs on standard pole configurations are guaranteed up to 80 MPH. Please consult factory for areas with wind ratings higher than 80 MPH. Caution: The Courtsider Sports Lighting Guarantee does not apply if the pole/bracket/fixture combination is used to support any other items, such as flags, pennants or signs, which would add stress to the pole. Courtsider Sports Lighting cannot accept responsibility for harm or damage caused in these situations.


## ORDERING CHART

Assembly Type	Luminaire Wattage	Luminaire Voltage	Pole Type	Pole Height <sup>4</sup>	Pole Material	Assembly Finish
<b>APR-A</b> (single)	<b>1000</b> - 1000 Watt Pulse-Start Metal Halide	<b>MT</b> - Multi-Tap <sup>1</sup> <b>480V</b> <b>220/240V 50HZ<sup>2</sup></b> (1000 watt only)	<b>AB</b> - Anchor Base <sup>3,4,5</sup>	<b>24</b>	<b>511</b> - 5" O.D. 11 Ga. Steel <b>507</b> - 5" O.D. 7 Ga. Steel <b>RTP11</b> - Round Tapered 11 Ga. Steel	<b>BLK</b> - Black <b>GRN</b> - Green <b>BRZ</b> - Bronze <b>PLP</b> - Platinum Plus <b>WHT</b> - White <b>GPT</b> - Graphite <b>MSV</b> - Metallic Silver
<b>APR-B</b> (twin 180°)			<b>DB</b> - Direct Burial <sup>4,5</sup>	<b>26</b>		
<b>APR-C</b> (twin 70°)				<b>28</b>		
<b>APR-D</b> (quad)						

EXAMPLE OF A TYPICAL ORDER

**APR-A 1000 MT AB 24 511 BLK**

- 1 - MT multi-tap ballasts include taps for 120V, 208V, 240V or 277V.
- 2 - For international applications where 50 hertz power is standard (e.g., Europe & Asia). Available for 1000 watt only.
- 3 - All anchor base assemblies are supplied with galvanized anchor bolts and aluminum base covers.
- 4 - For anchor base assemblies, the heights shown are the pole length. The fixture mounting height will be 2' higher than the pole height using the upsweep bracket (e.g., with a 24' pole, the fixture mounting height is 26'). For direct burial assemblies, the height shown is the above grade section. Direct burial poles will also include a 4' below grade section (e.g., a 24' direct burial pole is 28' overall length). Direct burial poles are limited to maximum 24' above grade height.
- 5 - The 5" O.D. 11 Ga. pole is used for single assemblies only. The 5" O.D. 7 Ga. pole is used for twin 180° and 70° assemblies. The anchor base round tapered pole is used for quad assemblies. Direct burial poles for quad assemblies are not available.
- 6 - Under normal use, the AeroPro fixture produces acceptable light cutoff. For highly sensitive applications, the optional external house side shield is available.
- 7 - The GFI receptacle installs in the standard handhole location 12" above the pole base.
- 8 - DGP is an inner-coating of a water-based automotive-grade corrosion preventative applied to the bottom portion of the pole to protect against moisture and atmospheric corrosive matter.

Luminaire Options	Pole Options
HSS - House Side Shield <sup>6</sup>	GFI - Weatherproof Duplex Receptacle w/ GFCI protection <sup>7</sup>
	LAB - Less Anchor Bolts
Intertek wet location	DGP - DuraGrip <sup>®</sup> Plus Interior Pole Coating <sup>8</sup>
<b>ACCESSORY ORDERING INFORMATION</b> (Accessories are field installed)	
Description	Order Number
APR VFT HSS - House Side Shield	143587BLK
<b>HOUSE SIDE SHIELD</b>	<b>VERTICAL FORWARD THROW (VFT)</b> (143587BLK)

## FINISHES



All AeroPro components are finished with DuraGrip<sup>®</sup>, Courtsider Sports Lighting's revolutionary, superior, baked-on powder finishing process that produces an exceptionally attractive appearance. DuraGrip polyester finish withstands extreme weather changes without cracking or peeling. Finish is guaranteed for a full five years.