IAHP1

Applications

The ISON IAHP1 industry leading lumen per watt performance maximizes energy savings and leads to the lowest total cost of ownership for exterior lighting. The ISON Area Light High Performance provides uniform distribution for area and site lighting in retail, commercial, and residential applications including driveways and parking areas. Replaces up to 1200W HID industrial fixtures.

Project Name:	
Catalog Number:	
Type:	
Note:	
Date:	

IAHP1C1UNVFD840BRT3-SP

UL CERTIFIED · UL WET RATED · IP65 · IP67

IK10 Rated · ida DARK SKY APPROVED · TITLE 24 COMPLIANT · 3G Vibration Rating · DLC LISTED PREMIUM

Construction & Design

- Type III, IV, and Type V light distributions
- 13,000 to 63,000 lumens
- Precision engineered lens made of optical grade polycarbonate for maximum light intensity
- Tool-less access to electrical components for field maintenance and installation
- Eight lumen packages offered across three fixture sizes
- Anti-corrosion stainless steel hardware
- Heavy duty one piece die-cast aluminum housing with external heatsink for optimal thermal management
- Fixture comes standard in bronze. Black and white fixture housing available

Additonal Options

- Multiple mounting options
- Light shield kit options

Electrical

- Available in 120v-277v and 277v-480v
- Factory wired for full dimming (0-10v)
- 10kV/5kA Surge Protection standard. 20kV/10kA surge protection available
- Optional 12v DC auxiliary power provided with 7-pin NEMA receptacle
- Power Factor > .90*
- Total Harmonic Distortion < 20%*

*Note: Varies based on option

Control and Sensor Options

- Factory installed 7-pin photocell receptacle for filed installation of photocell
- Photo control and occupancy sensor options
- Field or factory installed control and sensor options
- Remote Programming Sensors
- Onsite Network Programming Controls
- Internet/Cloud Based Network Programming Controls

Lumen Maintenance

See Lumen Maintenance Table on page 2

Fixture Certification & Listings

- UL/cUL Listed for Wet Locations
- RoHS Compliant Components
- IK10 Impact Rating
- Fixture is IP67 Rated
- Fixture with Sensor is IP65 Rated
- 3.0 G Vibration load rating per ANSI C136.31
- Dark Sky Approved. 3000K CCT with fixed mounts only
- Title 24 Compliancy when using optional sensor
- DesignLights Consortium premium qualified product
- Visit the DLC QPL for listed models

Warranty

See Orion's Product Limited Warranty for more details and information

Performance Information, 277v, ≥80 CRI, 4000K[1]

Nominal Lumen Code	Type V				Type IV				Type III				Input Current
	Actual Lumens	Wattage	LPW	BUG Rating	Actual Lumens	Wattage	LPW	BUG Rating	Actual Lumens	Wattage	LPW	BUG Rating	
A1	12,630lm	76w	165	B4-U0-G2	12,122lm	76w	159	B3-U0-G2	12,587lm	76w	165	B3-U0-G2	0.27A
B1	18,252lm	111w	164	B4-U0-G2	17,518lm	111w	158	B3-U0-G3	18,190lm	111w	164	B3-U0-G3	0.40A
C1	22,186lm	139w	160	B5-U0-G3	21,294lm	139w	153	B3-U0-G3	22,111lm	139w	159	B3-U0-G3	0.50A
D1	29,516lm	176w	168	B5-U0-G4	28,329lm	176w	161	B3-U0-G4	29,416lm	176w	167	B4-U0-G3	0.63A
E1	32,875lm	191w	172	B5-U0-G4	31,554lm	191w	165	B3-U0-G4	32,765lm	191w	171	B4-U0-G4	0.69A
F1	37,219lm	221w	169	B5-U0-G4	35,723lm	221w	162	B4-U0-G4	37,094lm	221w	168	B4-U0-G4	0.80A
G1	49,402lm	288w	171	B5-U0-G5	47,416lm	288w	164	B4-U0-G5	49,236lm	288w	171	B4-U0-G4	1.04A
H1	64,890lm	400w	162	B5-U0-G5	62,281lm	400w	156	B4-U0-G5	64,671lm	400w	162	B4-U0-G5	1.45A

Lumen Maintenance[2]

Series	Nominal Lumen Code	Nominal Lumens	Operating Temperature	Calculated Lumen Maintenance		
				L70	L80	L90
IAHP1	A1	13,000	25ºC	153,000	95,000	45,000
			50ºC	153,000	95,000	45,000
IAHP1	B1	19,000	25ºC	153,000	95,000	45,000
			50ºC	153,000	95,000	45,000
IAHP1	C1	23,000	25ºC	150,000	95,000	45,000
			50ºC	135,000	85.000	40,000
IAHP1	D1	31,000	25ºC	150,000	95,000	45,000
			50ºC	150,000	95,000	45,000
IAHP1	E1	34,000	25ºC	153,000	95,000	45,000
			50ºC	153,000	95,000	45,000
IAHP1	F1	38,000	25ºC	153,000	97,000	45,000
			50ºC	148,000	93,000	45,000
IAHP1	G1	48,000	25ºC	153,000	97,000	45,000
			50ºC	127,000	80,000	38,000
IAHP1	H1	63,000	25ºC	153,000	96,000	45,000
			45ºC	120,000	75,000	40,000

Additional Specification Information

[1] Actual performance may vary by up to ±10% of values listed; facility factors and fixture options can affect performance values

[2] Calculated hours based on TM-21 projections and components used at the time of testing. Warranty is not associated with Calculated Lumen Maintenance

Fixture Dimensions and Physical Information

Lumen Code	Length	Height	Width	Weight[3]	EPA (side) Using Slipfitter
A1/B1/C1	16.50"	2.20"	10.60"	9.00 lbs	.32 ft²
D1/E1/F1	20.30"	2.20"	13.70"	13.00 lbs	.36 ft²
G1/H1	23.00"	3.00"	14.10"	22.00 lbs	.50 ft²

G1/H1

D1/E1/F1

A1/B1/C1

Ambient Operating Temperature Range

Lumen Code	Standard Operating Ambient Temperature Range
A1/B1/C1/D1/E1/F1/G1	-40°C to 50°C (-40°F to 122°F)
H1	-40°C to 45°C (-40°F to 113°F)

Sensor Type	Operating Temperature Range
ENx	-35°C to 50°C (-31°F to 122°F)
WBxx	-40°C to 50°C (-40°F to 122°F)

Additional Specification Information

[3] Weight will vary based on option selection

3

Ordering Information Example (NOTE: No dashes or spaces unless noted below)

IAHP1C1UNVFD850BRT5-SP

Ordering Information (Enter Selected Catalog Number Below)

Series	Nominal Lumen Code	Voltage	Driver Type	CRI; Color Temp	Fixture Color	Light Distribution	Fixture Options*	Factory Installed Control Options	Packaging
Series	Nominal Lumen Code[4]	Voltage	Driver Type	CRI; Color Temp	Fixture Color	Light Distribution	Fixture Options*	Factory Installed Control Options	Packaging
IAHP1= ISON LED Area Light High Performance, Gen 1	**A1**= 13,000lm **B1**= 19,000lm **C1**= 23,000lm **D1**= 31,000lm **E1**= 34,000lm **F1**= 38,000lm **G1**= 48,000lm[5] **H1**= 63,000lm[5]	**UNV**= 120v-277v **HMV**= 277v-480v	**FD**= Full Dimming	**830**= 80CRI; 3000K[6] **840**= 80CRI; 4000K **850**= 80CRI; 5000K	**BR**= Bronze **BL**= Black[6] **WH**= White[6]	**T3**= Type III **T4**= Type IV **T5**= Type V	**[Blank]**= No Option **TS2**= 20kV/10kA Surge Protection **7R01**= 3/5/7-Pin Universal NEMA Receptacle[9]* **7R02**= 7 Pin NEMA Receptacle (with 12v power source)[9]*	(See below for part numbers and descriptions)	**-SP**= Single Pack

*__Note__: Universal NEMA 7-Pin receptacle used. See Page 5 for Photocell options.

Sensor and Controls Ordering Information

Factory Installed Control Options

(Blank)= No Control Options

IP66 Rated

WBxx= PIR Occupancy Sensor, HIGH/LOW/OFF, 0-10V Dimming, Switching Photocell, Bluetooth, Mobile App Programmable, 360°[5,7,8,9]

IP65 Rated

EN2= Enlighted Connected Lighting Sensor: Network Lighting Control Component, PIR Occupancy Sensor, Daylight Harvesting, High End Trim, Dimming Modes, Luminaire Level Lighting Control, Wireless Zones, Modified IEEE 802.15.4.1, BLE Radio, Temperature Sensor, Scene Control, Demand Response, Data Collection, BMS Integration, Cloud Access**[5,7,9]

EN3= Enlighted IoT: All Features of **EN2** - PLUS access to Apps: Space Management, Asset Tracking, and Contact Tracing Apps**[5,7,9]

**__Note__: For IoT cloud based and network systems See Page 5.

Additional Specification Information

[4] For actual lumens, see performance table

[5] H1 and G1 lumen packages are not compatible with **WBxx** or **ENx** sensor options

[6] Special order option, lead times vary

[7] For more information about these options go to our controls landing page

[8] "**xx**" in part number is a place holder for lens height of sensor. Either "20" or "40" can be included at the end of the part number to replace the "**xx**" placeholder

[9] **WBxx** and **ENx** cannot be used with **7R01** and **7R02** receptacles. **WBxx** and **ENx** have photocell capabilities

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Fixture Options (Factory Installed)

Motion Sensor
(WBxx)

Accessories (Sold Separately - Field Installed)

Mounting Options	
EXT-IAHP-SFT-001	Bronze Slip-fitter, 2-3/8" Tenons
EXT-IAHP-YKS-001	Bronze Yoke Mount, A1/B1/C1
EXT-IAHP-YKM-001	Bronze Yoke Mount, D1/E1/F1
EXT-IAHP-YKL-001	Bronze Yoke Mount, G1/H1
EXT-IAHP-TRN-001	Bronze Trunnion Mount, Min. 5.5" Square Pole
EXT-IAHP-ADJ-001	Bronze Adjustable Arm, Min. 4" Square Pole
EXT-IAHP-UPM-001	Bronze Universal Pole Mount Min. 3" Square or 4" Round Pole Kit
EXT-IAHP-UPM5-001	Bronze Universal Pole Mount Min. 3" Square or 5" Round Pole Kit
EXT-IAHP-UPM6-001	Bronze Universal Pole Mount Min. 3" Square or 6" Round Pole Kit
EXT-IAHP-SLM-001[6]	Bronze Slide and Lock, Min. 3" Square or 3-4" Round Pole
EXT-IAHP-WMA-001	Bronze Adjustable Wall Mount Arm Kit

Light Shield Options	
EXT-IAHP-BLS-001	Bronze Back Light Shield, Small, A1/B1/C1
EXT-IAHP-FLS-001	Bronze Back and Sides Light Shields, Small, A1/B1/C1
EXT-IAHP-BLM-001	Bronze Back Light Shield, Medium, D1/E1/F1
EXT-IAHP-FLM-001	Bronze Back and Sides Light Shields, Medium, D1/E1/F1
EXT-IAHP-BLL-001	Bronze Back Light Shield, Large, G1/H1
EXT-IAHP-FLL-001	Bronze Back and Sides Light Shields, Large, G1/H1

Note: To order a fixture bracket or Light Shield in Black change "**001**" to "**002**", or for White change "**001**" to "**003**". Example: EXT-IAHP-SFT-002

Control Options*	
EXT-IAHP-PE3-001	Twist-lock Photocell On/Off Daylight Sensing Only, 120-277v
EXT-IAHP-PE3-002	Twist-lock Photocell On/Off Daylight Sensing Only, 347v
EXT-IAHP-PE3-003	Twist-lock Photocell On/Off Daylight Sensing Only, 480v
EXT-IAHP-SHC-001	Shorting Cap

*Note: When ordering field installed control options, **7R01** or **7R02** needs to be selected in the factory ordering information on Page 4.

IoT Wireless Control Solutions*	
FYBR	IoT 7-Pin Intelligent Photocell Control System
NEDAP	IoT 7-Pin Smart Photocell Control System
Enlighted ([EN2](EN2)/[EN3](EN3))	IoT Sensor Based Control System

*Note: Systems require additional hardware and software to function for connectivity to local/ building and cloud based systems. For more information contact your Orion Representative about special order information, quoting and commissioning.

Additional Specification Information

[6] Special order option, lead times vary

Accessories (Field Installed)

Slipfitter
(EXT-IAHP-SFT-001)

Yoke Mount
(EXT-IAHP-YKS/YKM/YKL-001)

Trunnion Mount
(EXT-IAHP-TRN-001)

Adjustable Arm Mount
(EXT-IAHP-ADJ-001)

Universal Pole Mount Kit
(EXT-IAHP-UPMx-001)

Slide and Lock Mount
(EXT-IAHP-SLM-001)

Adjustable Wall Mount Arm Kit
(EXT-IAHP-WMA-001)
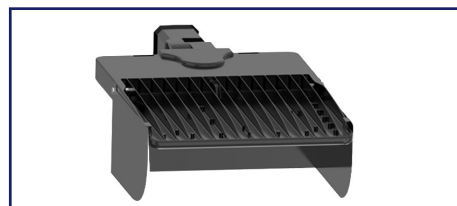
Light Shield
(EXT-IAHP-FLx-001)
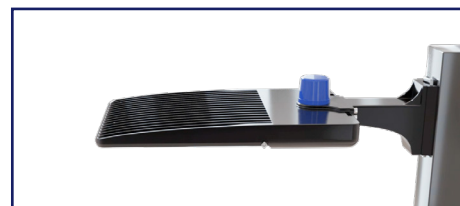
Photocell for A1 - F1 Models
(EXT-IAHP-PE3-00x)

Photocell for G1 and H1 Models
(EXT-IAHP-PE3-00x)

ISO FOOTCANDLE PLOTS
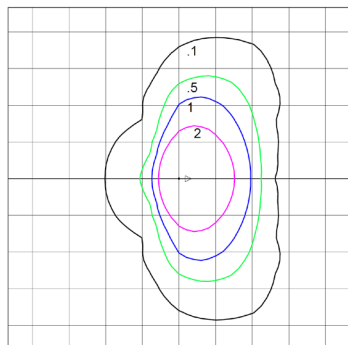
D1 850 T3
Distance are in Units of Mounting
Height
Mounting Height 30'
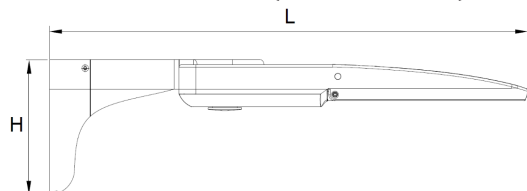Maximum Calculated Value: 8.57 Fc
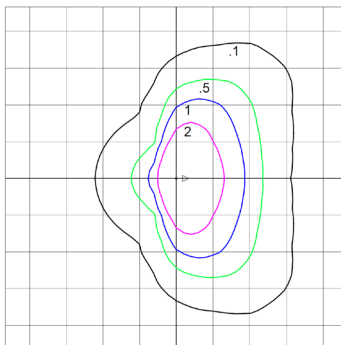
D1 850 T4
Distance are in Units of Mounting
Height
Mounting Height 30'
Maximum Calculated Value: 8.19 Fc
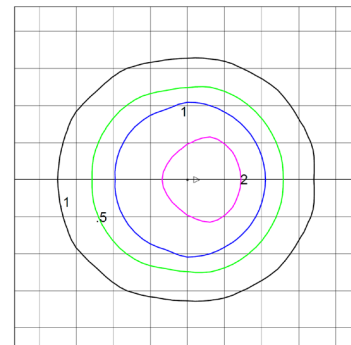
D1 850 T5
Distance are in Units of Mounting
Height
Mounting Height 30'
Maximum Calculated Value: 2.95 Fc

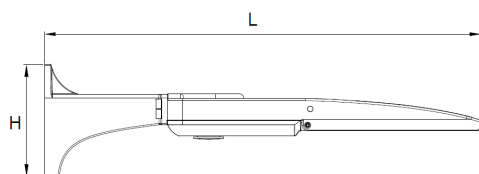## Fixture with Mounting Dimensions and Physical Information

Slide and Lock Mount (EXT-IAHP-SLM)

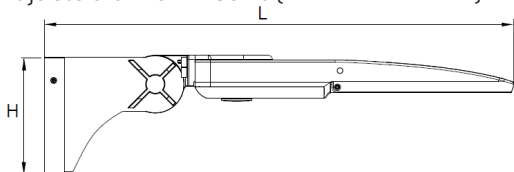| Lumen Code	Length	Height	Width	Weight	EPA (side @ 0°)
A1/B1/C1	22.68"	6.53"	10.60"	12 lbs	.33 ft²
D1/E1/F1	26.38"	6.53"	13.70"	16 lbs	.37 ft²
G1/H1	28.19"	6.53"	14.10"	25 lbs	.51 ft²
Note: This mounting kit can adapt to 3"-4" round or min. 3" square pole					

Universal Pole Mount (EXT-IAHP-UPM)

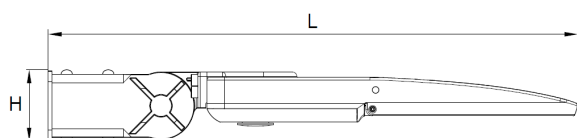| Lumen Code	Length	Height	Width	Weight	EPA (side @ 0°)
A1/B1/C1	23.31"	6.70"	10.60"	13 lbs	.38 ft²
D1/E1/F1	27.01"	6.70"	13.70"	17 lbs	.31 ft²
G1/H1	28.82"	6.70"	14.10"	26 lbs	.56 ft²
Note: This mounting kit can adapt to 4"/5"/6" round or min. 3" square pole.					

Adjustable Arm Mount (EXT-IAHP-ADJ)
Adjustable Wall Mount (EXT-IAHP-WMA)

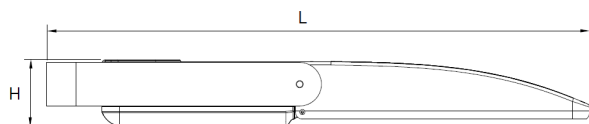| Lumen Code	Length	Height	Width	Weight	EPA (side @ 0°)
A1/B1/C1	25.20"	6.40"	10.60"	11.5 lbs	.40 ft²
D1/E1/F1	28.03"	6.40"	13.70"	15.5 lbs	.44 ft²
G1/H1	30.71"	6.40"	14.10"	24.5 lbs	.58 ft²
Note: The arm mount (EXT-IAHP-ADJ) can only adapt to min. 4" square pole.					

Slipfitter Mount (EXT-IAHP-SFT)

Lumen Code	Length	Height	Width	Weight	EPA (side @ 0°)
A1/B1/C1	23.62"	3.07"	10.60"	11.5 lbs	.32 ft²
D1/E1/F1	27.32"	3.07"	13.70"	15.5 lbs	.36 ft²
G1/H1	29.13"	3.07"	14.10"	24.5 lbs	.50 ft²
Note: This slipfitter can adapt to 2-3/8" tenons.					

Yoke Mount (EXT-IAHP-YKx)

Lumen Code	Length	Height	Width	Weight	EPA (side @ 0°)
A1/B1/C1	18.83"	2.20"	10.60"	11.5 lbs	.42 ft²
D1/E1/F1	21.94"	2.20"	13.70"	15.5 lbs	.35 ft²
G1/H1	24.55"	3.00"	14.10"	24.5 lbs	.51 ft²

Trunnion Mount (EXT-IAHP-TRN)
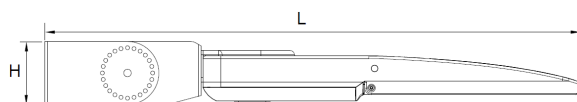
Lumen Code	Length	Height	Width	Weight	EPA (side @ 0°)
A1/B1/C1	23.44"	2.80"	10.60"	12.5 lbs	.32 ft²
D1/E1/F1	27.16"	2.80"	13.70"	16.5 lbs	.36 ft²
G1/H1	28.98"	3.30"	14.10"	25.5 lbs	.50 ft²
Note: This mounting kit can adapt to min. 5.5" square pole.					