# Avista LED Light Engine Retrofit Guide

The Avista (AVI-G3) is a high powered, durable LED light engine that will work with many luminaires on the market today.
This guide addresses the common issues of qualifying the job and getting the required fixture information to create a simple field installation solution for the end user.

With some basic knowledge of how the AVI2 works, the decision makers and installers can pre-qualify and choose the right AVI-G3 model for the luminaire.

Diversity is the name of the game.
By design, Avista has the capacity to retrofit some of the most challenging luminaires in the lighting industry. HID luminaires were not designed to use technology 10 to 20 years advanced from when it was originally manufactured. However, Amerlux has come up with a "skeleton key" of sorts to fit as many applications as possible. With just basic information about your retrofit idea, Avista can be the solution to providing a dramatic improvement in quality of lighting and extend the lifespan of the luminaire.
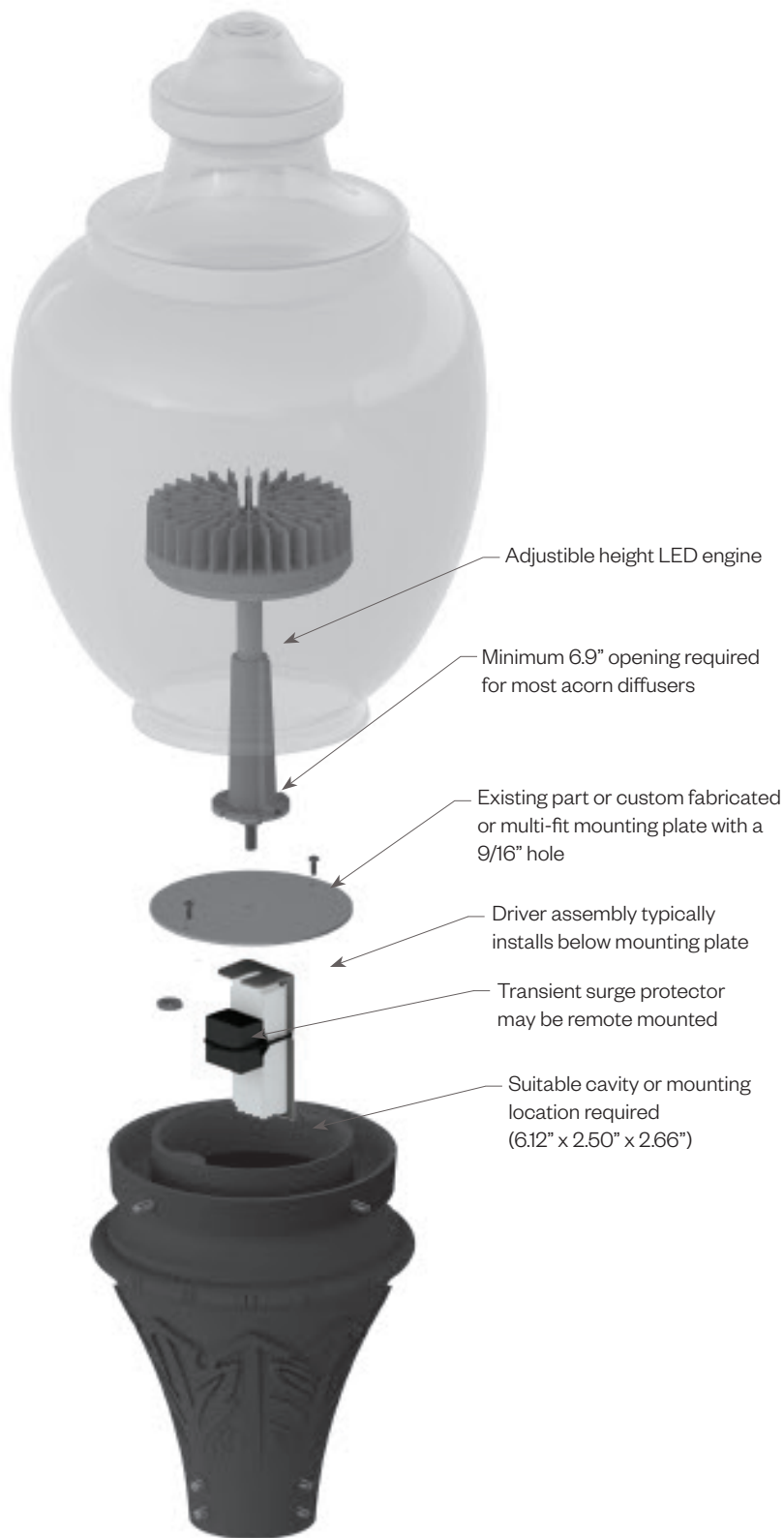
Some of Avista's retrofit experience:

| | | |
|---|---|---|
| Holophane | Louis Poulsen | Stermberg |
| Hadco | Lumec | Visco |
| King | Pemco | |

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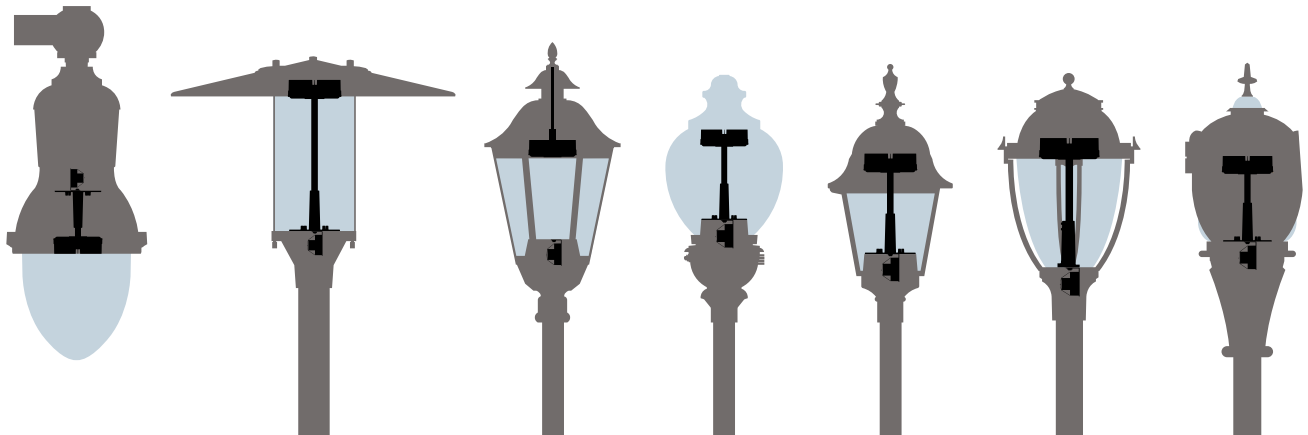
# Typical AVI-G3-U Mounting

The AVI-G3-U model Avista LED engine is designed for the purpose of retrofitting many post-top luminaires where the LED engine is stem-mounted above the driver assembly.

Adjustable height LED engine

Minimum 6.9" opening required for most acorn diffusers

Existing part or custom fabricated or multi-fit mounting plate with a 9/16" hole

Driver assembly typically installs below mounting plate

Transient surge protector may be remote mounted

Suitable cavity or mounting location required
(6.12" x 2.50" x 2.66")

## Mounting Checklist:

Suitable Mounting Location
- ☐ A suitable location or existing mounting plate with a minimum 9/16" hole
  or
- ☐ A multi-fit, or custom fabricated mounting plate designed for the specific luminaire (contact factory)

- ☐ A minimum 6.9" opening required to allow the Avista clearance into the diffuser

- ☐ A suitable cavity or mounting location for driver assembly (6.12" x 2.50" x 2.66")
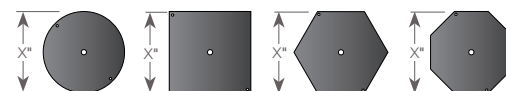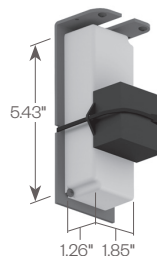
## Optional AVI-U Mounting Plates:

**Multi-fit**
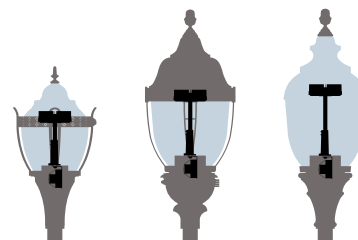Allows for various screw patterns and configurations.
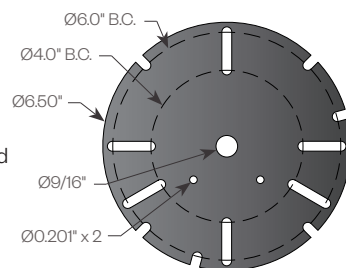
Ø6.0" B.C.
Ø4.0" B.C.
Ø6.50"
Ø9/16"
Ø0.201" x 2

**Custom Mounting Plates** (consult factory):

X"  X"  X"  X"

## Driver Assembly:

5.43"

1.26"  1.85"

## AVI-G3-U accommodates a variety of applications.

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## Typical AVI-G3-P Mounting

The AVI-G3-P model Avista LED engine is designed for use in pendant mount applications. It is suitable for use in a variety of luminaires from tear-drop to bell shaped fixtures, or in lanterns when no visible post is desired.

**Pendant kit includes:**
- 20" of leads between light engine and driver assembly
- 1/4-20 all-thread mounting hardware
- 1/4" IPS mounting hardware

Pendant configurations utilize a custom mounting plate, bracket, or mounting locations often found in lighting fixtures.

LED engine

Transient surge protector may be remote mounted

Driver assembly can be mounted in a suitable cavity.

**Mounting Checklist:**

Suitable Mounting Location
- ☐ A suitable pendant mounting plate or bracket with a minimum 9/16" hole
  *or*
- ☐ A suitable pendant mounting plate or bracket with a minimum 9/16" hole
  *or*
- ☐ A custom fabricated mounting plate designed for the specific luminaire (consult factory)

- ☐ Driver cavity above light engine
  or
- ☐ Driver cavity below light engine (20" wire provided)

- ☐ A suitable cavity or mounting location for driver assembly (6.12" x 2.50" x 2.66")
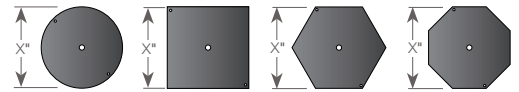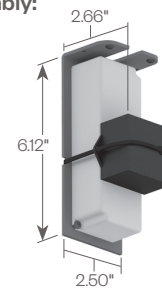
**Optional AVI-P Mounting Plates:**
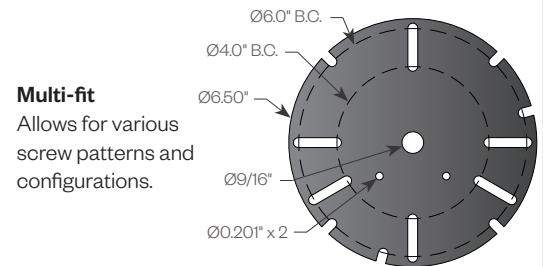
**Multi-fit**
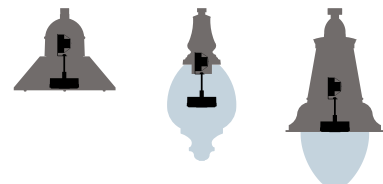Allows for various screw patterns and configurations.

Ø6.0" B.C.
Ø4.0" B.C.
Ø6.50"
Ø9/16"
Ø0.201" x 2

**Custom Mounting Plates** (consult factory)**:**

X"

**Driver Assembly:**

2.66"
6.12"
2.50"

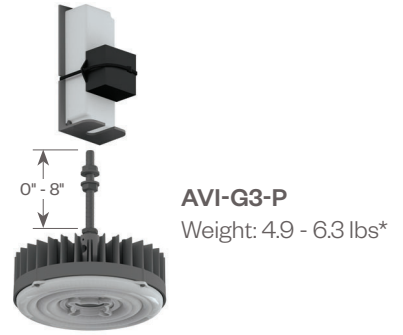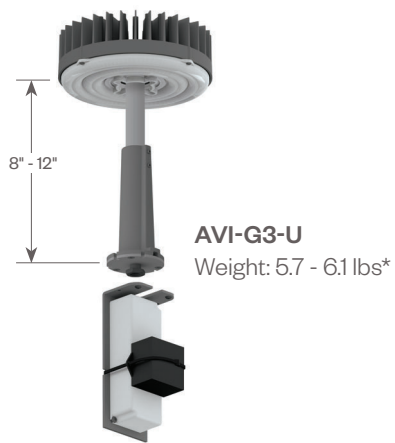**AVI-G3-U accommodates a variety of applications.**

Driver shown installed above light engine.

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## Standard Modules

8" - 12"

**AVI-G3**
Weight: 6.2 - 6.6 lbs*

8" - 12"

**AVI-G3-U**
Weight: 5.7 - 6.1 lbs*

0" - 8"

**AVI-G3-P**
Weight: 4.9 - 6.3 lbs*

12" - 16"

**AVI-G3-T**
Weight: 6.3 - 6.7 lbs*

12" - 16"

**AVI-G3-U-T**
Weight: 5.9 - 6.3 lbs*

8" - 12"

**AVI-G3-K/V**
Weight: 6.3 - 6.7 lbs*
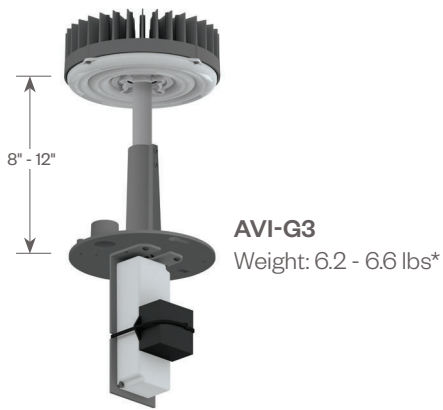
## Light Distribution Types
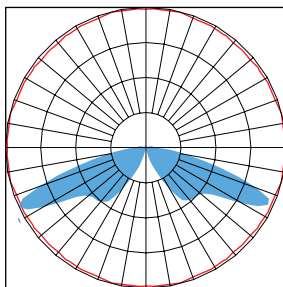
**SY**
Type V

**AS**
Type IV

**SO**
Type III

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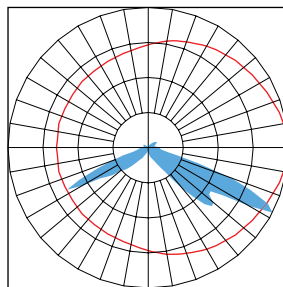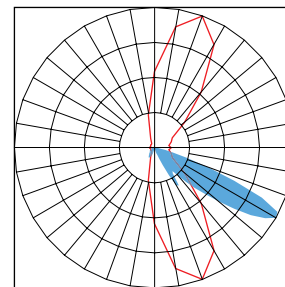
## How To Order

**Step 1:** Choose a Model (pg 4) that best suits your retrofit project.

**Step2:** Choose a Light Distribution

**Step 3:** Choose a Code that represents the wattage and lumens desired.

**Step 4** (Optional Accessory): Choose a mounting plate if needed.

## Performance

**ALL IES files supplied are 3000K. For 2700K use a 0.905 multiplier; For 4000K use a 1.05 multiplier.**

| Model | Distribution | CCT | Power Level | System Watts | LED Engine Lumens | LED Engine LPW | Lumens w/DLC Acorn | LPW DLC* Acorn | BUG Rating |
|---|---|---|---|---|---|---|---|---|---|
| AVI-G3 | SY | 27 | P1 | 30 | 3651 | 122.9 | 3345 | **112.6** | 2-3-2 |
| | | 30 | | | 4034 | 135.8 | 3695 | **124.4** | 2-3-2 |
| | | 40 | | | 4246 | 143.0 | 3890 | **131.0** | 2-3-2 |
| | AS | 27 | | | 3505 | 118.0 | 3197 | **107.6** | 1-3-2 |
| | | 30 | | | 3872 | 130.4 | 3531 | **118.9** | 1-3-2 |
| | | 40 | | | 4076 | 137.2 | 3717 | **125.2** | 1-3-2 |
| | SO | 27 | | | 3296 | 111.0 | 2976 | **100.2** | 1-3-1 |
| | | 30 | | | 3579 | 120.5 | 3232 | **108.8** | 1-3-1 |
| | | 40 | | | 3883 | 130.7 | 3506 | **118.0** | 1-3-1 |
| | SY | 27 | P2 | 44 | 5245 | 119.2 | 4805 | **109.2** | 2-3-2 |
| | | 30 | | | 5794 | 131.7 | 5308 | **120.6** | 2-3-2 |
| | | 40 | | | 6099 | 138.6 | 5587 | **127.0** | 2-3-2 |
| | AS | 27 | | | 5035 | 114.4 | 4592 | **104.4** | 2-3-2 |
| | | 30 | | | 5562 | 126.4 | 5073 | **115.3** | 2-3-2 |
| | | 40 | | | 5855 | 133.1 | 5340 | **121.4** | 2-3-2 |
| | SO | 27 | | | 4654 | 105.8 | 4203 | 95.5 | 1-3-2 |
| | | 30 | | | 5141 | 116.8 | 4642 | **105.5** | 1-3-2 |
| | | 40 | | | 5412 | 123.0 | 4887 | **111.1** | 1-3-2 |
| | SY | 27 | P3 | 60 | 7026 | 116.1 | 6437 | **106.4** | 2-3-3 |
| | | 30 | | | 7762 | 128.3 | 7111 | **117.5** | 2-3-3 |
| | | 40 | | | 8170 | 135.0 | 7485 | **123.7** | 3-3-3 |
| | AS | 27 | | | 6745 | 111.5 | 6152 | **101.7** | 2-3-2 |
| | | 30 | | | 7451 | 123.2 | 6795 | **112.3** | 2-3-2 |
| | | 40 | | | 7843 | 129.6 | 7153 | **118.2** | 2-3-2 |
| | SO | 27 | | | 6235 | 103.1 | 5630 | 93.1 | 2-3-3 |
| | | 30 | | | 6887 | 113.8 | 6219 | **102.8** | 2-3-3 |
| | | 40 | | | 7249 | 119.8 | 6546 | **108.2** | 2-3-3 |
| | SY | 27 | P4 | 86 | 9411 | 109.4 | 8622 | **100.3** | 2-3-3 |
| | | 30 | | | 10394 | 120.9 | 9524 | **110.7** | 2-3-3 |
| | | 40 | | | 10943 | 127.2 | 10025 | **116.6** | 3-3-3 |
| | AS | 27 | | | 9035 | 105.1 | 8240 | 95.8 | 2-3-2 |
| | | 30 | | | 9980 | 116.0 | 9102 | **105.8** | 2-3-2 |
| | | 40 | | | 10505 | 122.2 | 9581 | **111.4** | 2-3-2 |
| | SO | 27 | | | 8595 | 99.9 | 7761 | 90.2 | 2-3-3 |
| | | 30 | | | 9494 | 110.4 | 8573 | **99.7** | 2-3-3 |
| | | 40 | | | 9994 | 116.2 | 9024 | **104.9** | 2-3-3 |

\* Numbers in **BOLD** indicate that the configuration meets DLC standards.

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