

LEGEND

Proposed Lighting Improvement Locations

Figure 1



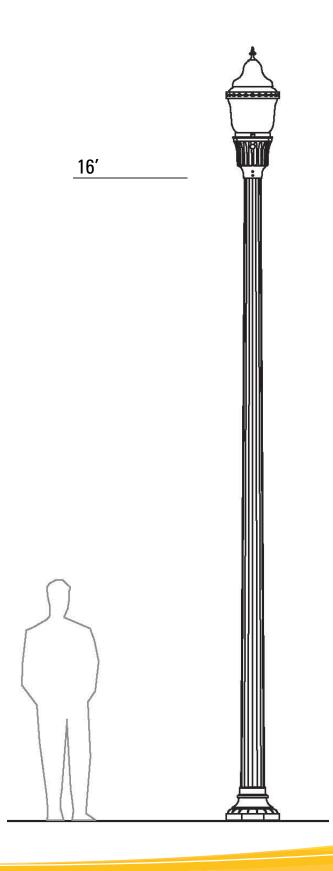
Area 1 – Tall overgrown trees that needs pruning.



Area 3 Muni Overhead wires



Area 4 - Multiple agencies streetlight pole. PG&E/MUNI/PUC



DESCRIPTION

FIXTURE HEAD

- Historic style luminaire
- Standard cast finial
- Prismatic borosilicate glass refractor
- Type II, III or V distribution as required
- Decorative band trim
- Modern fluted swing open housing for ballast
- Modular ballast tray
- UL listed for wet location
- Nominal 15.25" Dia. x 39.25" H

POLE

- Round fluted tapered
- Hot-diped galvanized steel coating, 11 GA steel
- Optional GFIC electrical outlet near top of pole with NEC compliant in-use wet location receptacle cover
- 3" dia. tenon at top
- Nominal 16' H x 7.17" dia. at base to 4.93" at top

POLE BASE

- Slotted bolt holes to fit 11-11.5" dia. bolt circle
- 1" dia. x 36" bolts provided
- Two piece cast aluminum octagonal base cover

FINISH:

• Powder coat finish - Black

An existing installation of this style of fixture can be found on the Embarcadero at Mission Street.

FIXTURE HEAD MANUFACTURER

Holophane
Utility GranVille Premier Series
GVPU-Lunar-Lamp option*-12-M-B-Distribution option*-B-S-B
Band finish to match housing-Mod. wireless control
system-House side shield option*-Voltage per EE

*Options:

- 1. Lamp: 70W HPS = cat# 70H, 100W HPS = cat# 10H, 150W HPS = cat# 15H
- 2. Distribution: Type II = cat# 6, Type III = cat# 7, Type V = cat# 5
- 3. House side shield = cat# GVPHPOUSE 90° or cat# GVPHOUSE 120°

POLE & BASE COVER MANUFACTURER

Union Metal Nastalgia Series Denver Drawing # N1122-68-B60-GFIC option*-Black

*Options:

1. GFIC electrical outlet near top of pole with NEC compliant in-use wet location receptacle cover = cat# Y2, No GFIC = cat# Y1

CONTROLS

- Integral control device to be compatible with City asset management wireless control system.
- A control signal receiving device with requisite antennae is to be included in the fixture head and is to be coordinated with location on fixture reserved for twist-lock photocell receptacle.

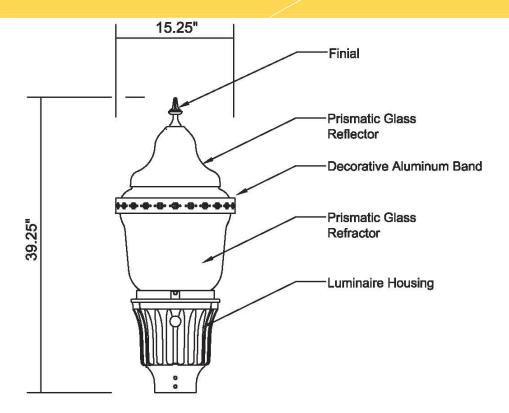
LAMP

- (1) High pressure sodium lamp
- 70W, 100W or 150W as required
- Mogul Base
- 2000K
- 70W=LU70/SBY/XL; 100W=LU100/SBY/XL; 150W=LU150/55/SBY/XL
- By GE

VOLTAGE

120V or 240V per Electrical Engineer

SAN FRANCISCO STREET LIGHT PLAN FIXTURE CATALOGUE TECHNICAL DETAILS



Specifications

GENERAL DESCRIPTION

The GranVille Premier is designed for ease of maintenance with the plug-in electrical module common to each of the luminaires in Holophane's Utility Luminaire Series. This unit also utilizes a latched, swing open door to allow relamping through the housing without the need to remove the glass assembly. The traditional acom shaped luminaire, while reminiscent of the 1920's, contains a precision optical system that maximizes post spacings while maintaining uniform illumination.

OPTICAL SYSTEM

The optical system consists of a precisely molded three-piece thermal resistant borosilicate glass refractor and top reflector mounted within decorative aluminum ribs and banding. The glass top reflector redirects over 50% of the upward light into the controlling refractor while allowing a soft uplight component to define the traditional acom shape of the luminaire. A decorative aluminum cover is available. The lower refractor uses precisely molded prisms to maximize pole spacings while maintaining uniform illuminance. Two refractors are available, symmetric distribution and asymmetric distribution. The cutoff optic option replaces inner glass reflector with segmented

LUMINAIRE HOUSING

The luminaire housing, cast of aluminum, provides an enclosure for the plug-in electrical module. Glass optical assembly is secured in the factory to this housing using stainless steel 1/4-20 bolts. 1/4-20 bolts also support the decorative rib and banding assembly. The nickel plated lamp grip socket and three station incoming line terminal block are prewired to a five conductor receptacle for ease in connection the electrical module. The slipfitter will accept a 3" by 2-7/8" to 3-1/8" O.D. tenon.

LUMINAIRE HOUSING / DOOR

Cast of aluminum, the housing / door is removable without the use of tools and is retained by a nonconductive lanyard. For units with an E.E.I.-N.E.M.A. twist lock photocell receptacle, the housing contains a "window" to allow light to reach the cell.

ELECTRICAL MODULE

The ballast components are mounted on a steel plate that is removable without the use of tools. A matching five conductor plug connects to the receptacle in the luminaire housing to complete the wiring. Where a starting aid is required, it is provided with a separate plug-in connector and can be replaced without the use of tools. For photoelectric operation, the electrical module is provided with an E.E.I.-N.E.M.A. twist lock photocell receptacle.

BALLASTS

(Refer to Ballast Data Sheet for specific operation characteristics)

miro-metal reflector which is designed for less than 5% uplight

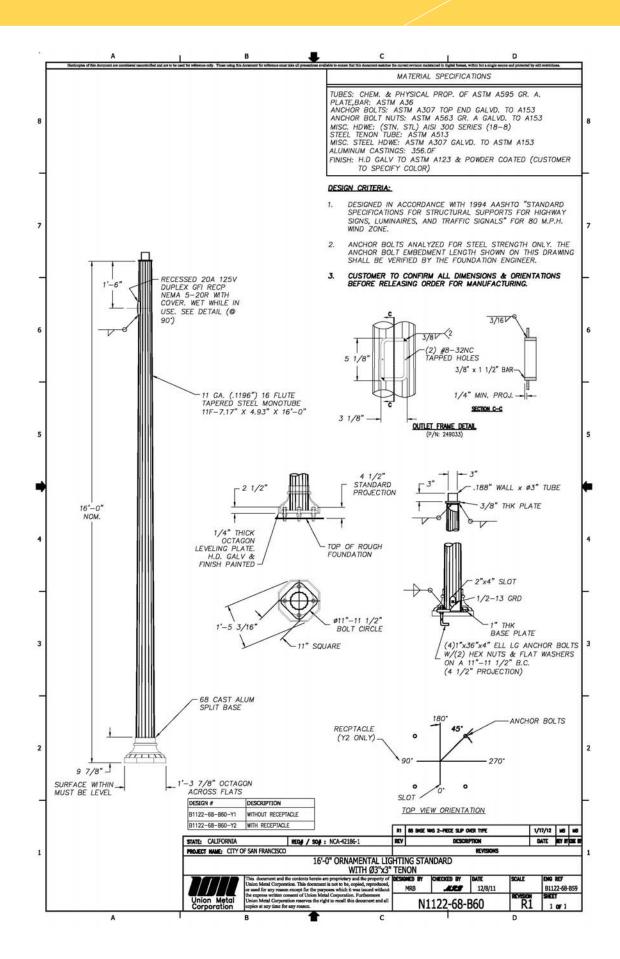
50 watt 120 volt High Pressure Sodium (HPS) ballasts are High Power Factor Reactor type. All other HPS ballast are High Power Factor Autotransformer type.

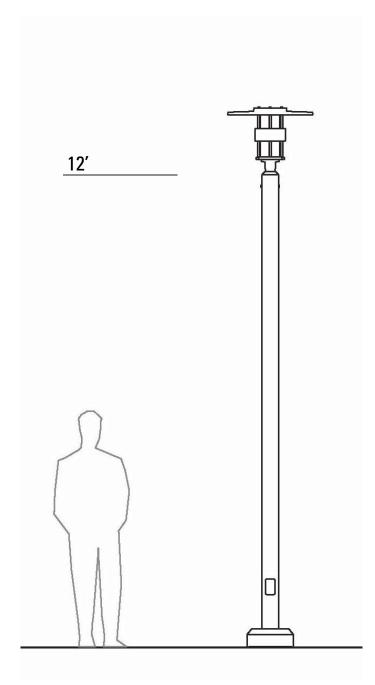
FINISH

The luminaire is finished with polyester powder paint applied after a seven stage pretreatment precess to insure maximum durability. **UL LISTING**

The luminaire is UL listed as suitable for wet locations at a maximum 40° C ambient temperature for HID

SAN FRANCISCO STREET LIGHT PLAN FIXTURE CATALOGUE TECHNICAL DETAILS





DESCRIPTION

FIXTURE HEAD

- Fiber glass top shade
- Cylindrical UV stabilized polycarbonate enclosure with aluminum band at middle
- Symmetric distribution
- Dimming capability
- IP 65
- Nominal 19.3" H x 25.8" Dia.

POLE

Pole:

- Straight smooth cast aluminum pole
- Powder coat finish
- Nominal 12' H x 5" Dia.

POLE BASE

- 10" bolt circle
- 1" dia. bolts by the contractor per City requirements, 36" length min.
- Two piece base cover

FINISH:

• Powder coat finish - Natural Aluminum or Black

This fixture is new to San Francisco streets.

FIXTURE HEAD MANUFACTURER

Louis Poulsen

SATT-MIN LED/53W/4000K/120-277V/Finish option*/ T-RSA-5"-.188" Wall thickness/12'/Finish option*/10" Bolt circle/1"x36" Anchor bolts/0-10V Dimming/Per drawing #131-15122-002/ Mod. wireless control system

*Options:

1. Finish: Natural Painted Aluminum = NAT PAINT ALU; Black = BLK

POLE & BASE COVER MANUFACTURER

Louis Poulsen Included in above.

CONTROLS

- 0-10v dimming module to be included in the fixture.
- Dimming module to be compatible with City asset management wireless control system.
- A corresponding control signal receiving device with requisite antennae is to be included in the fixture head and is to be coordinated as required.

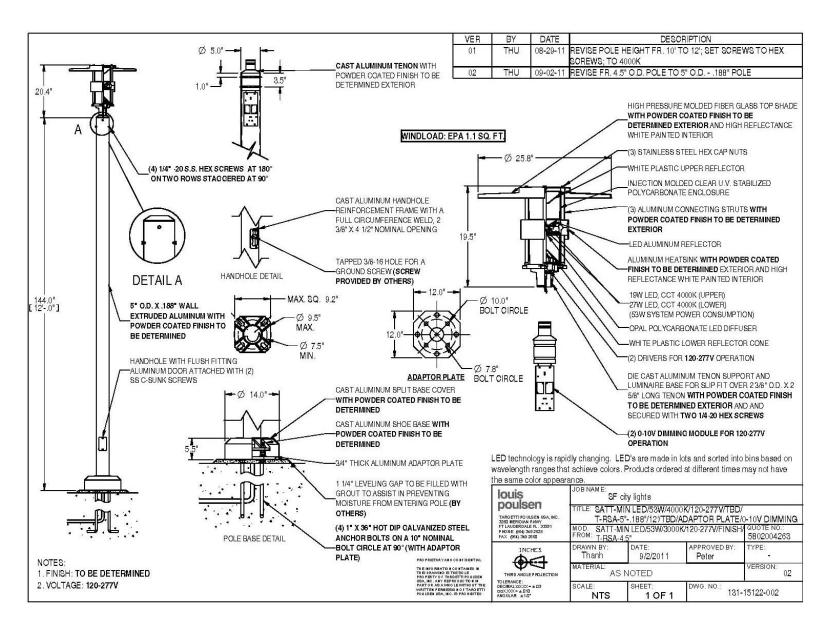
LAMP

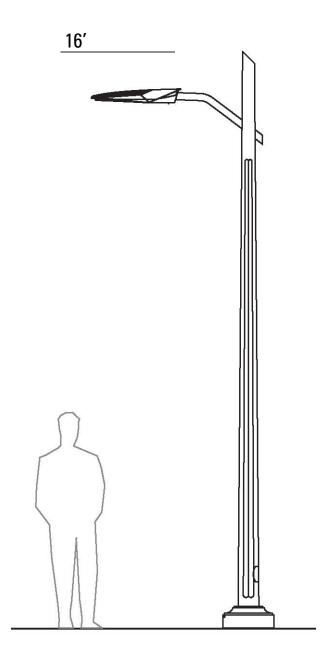
LED

- 53W
- 4000K
- Included

VOLTAGE

120V or 240V per Electrical Engineer





DESCRIPTION

FIXTURE HEAD

- Die cast aluminum housing
- Type II, III, IV or V distribution as required
- Adjust tilt +/- 5 degrees
- Horizontal tenon mounted
- Dimming capability
- IP 66
- Nominal 4.25"H X 29.75" L X 13.25" W

POLE

- Round fluted tapered pole; smooth surface near top with pipe arm
- Hot-dip galvanized coating, steel pole
- Location provision for GFIC outlet box as required
- Nominal 16' H x 7" dia. at base to 3.92" dia. top

ARM

• Arm span: 1.83' or 4'

POLE BASE

- Standard 10.75" slotted bolt circle fits up to a 11-5/8" bolt circle
- 1" dia. x 36"L x 4" bolts provided
- Two piece, 17" dia. cast aluminum base cover

FINISH:

• Head:

Powder coat finish - Black or Natural Aluminum

• Pole:

Powder coat finish - Black

or

Galvanized Only

This fixture is new to San Francisco streets.

FIXTURE HEAD MANUFACTURER

Philips Lumec

Roadstar

GPLS-Wattage option*-Distribution option*-Voltage per EE-Finish Option*-Mod. wireless control system-DMG

*Options:

- 1. Wattage: 65W = cat # 65W49LED4K, 90W = cat # 90W49LED4K
- 2. Distribution type: LE2, LE3, LE4, LE5
- 3. Finish: Black = cat# BKTX, Natural Aluminum = cat# NP

POLE & BASE COVER MANUFACTURER

Valmont

FL30-4W-700A160 - Finish option*-Arm option*- GFIC option*-Drawing DB00945

*Options:

- 1. Finish: Black = cat# FP/GV/BK, Galvanized Steel = cat# GV
- 2. Arm: Nom. 2' = cat# 1.83' Arm, Nom. 4' = cat# 4.00' Arm
- 3. Provision for GFIC electrical outlet (outlet provided by contractor) = cat# FST 4' from top of pole

CONTROLS

- 0-10v dimming module to be included in the fixture.
- Dimming module to be compatible with City asset management wireless control system.
- A corresponding control signal receiving device with requisite antennae is to be included in the fixture head and is to be coordinated with location on fixture reserved for twist-lock photocell receptacle.

LAMP

LED

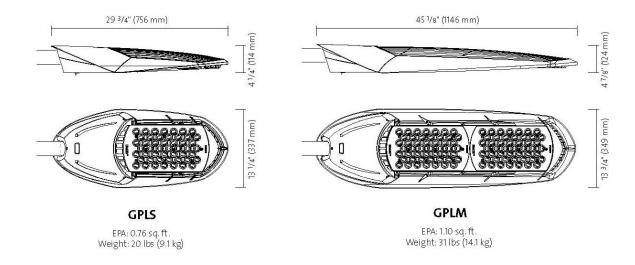
- 65W or 90W as required
- 4000K
- Included

VOLTAGE

120V or 240V per Electrical Engineer

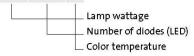
LUMINAIRES

Conform to the UL 1598 and CSA C22.2 No. 250.0-08 standards



LAMPS / LED

LAMP CODE DEFINITION / 40W 49LED 4K



LAMP	LUMINAIRES AVAILABILITY	RATED LIFE HRS. ¹	COLOR TEMPERATURE ²	LAMP WATTAGE		
40W30LED4K	GPLS	70,000	4000K	40W		
40W49LED4K	GPLS	70,000	4000K	42W		
60W30LED4K	GPLS	70,000	4000K	60W		
65W49LED4K	GPLS	70,000	4000K	65W		
90W49LED4K	GPLS	70,000	4000K	90W		
105W79LED4K	GPLM	70,000	4000K	105W		
130W98LED4K	GPLM	70,000	4000K	130W		
150W79LED4K	GPLM	70,000	4000K	150W		
180W98LED4K	GPLM	70,000	4000K	180W		

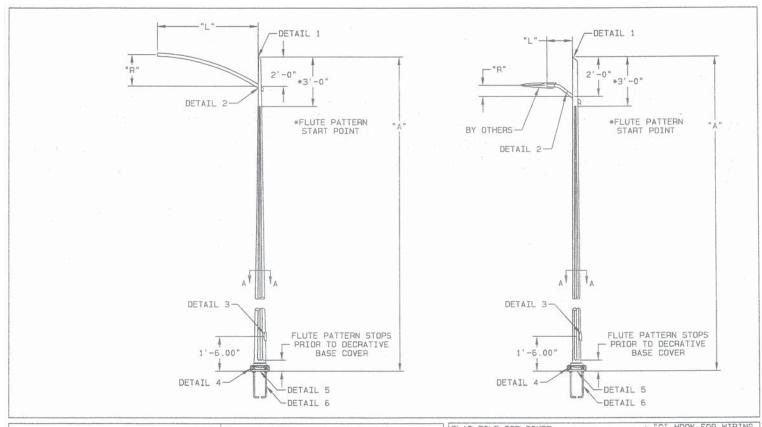
 $^{^{7}\,}$ Rated life represents the time it takes for the LED system to reach 70% of initial lumen output.

LUMINAIRE OPTION: DMG 0-10V dimming-ready power supply

² On average.

> Lamp lumen depreciation factor: 85%

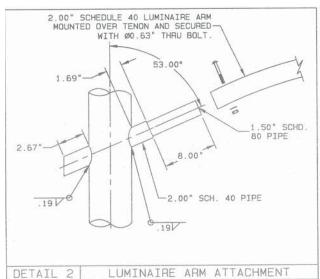
SAN FRANCISCO STREET LIGHT PLAN FIXTURE CATALOGUE TECHNICAL DETAILS

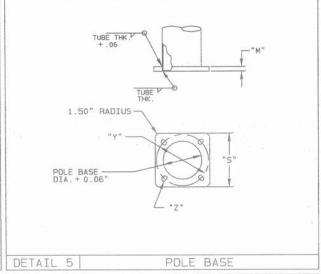


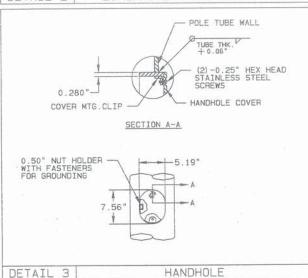
MATERIA	AL DATA		SECTION A-A	FLAT POLE TOP COVER— "C" HOOK FOR WIRING 11 GAUGE H.R.M.S. AND HANDLING-
COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)		0.38" DIA. COMMERCIA GRADE HOT ROLLED BAR
TAPERED TUBES	A595 GR.A	55		STAINLESS STEEL
BASE PLATE	A36	36	. //	SCREWS
LUM. ARM SHAFT	A53	36	(+) Ald	
ANCHOR BOLTS	F1554 GR.55	55	\$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	200/50
GALVANIZING SHAFTS	A123		(())	COVER PROVIDED WITH 45° MOUNTING
GALVANIZING ACC.	A153			NEOPRENE GASKET.
NUTS	A563 GR. A			The original and the second of
WASHERS	F463		~~~	DETAIL 1 POLE TOP

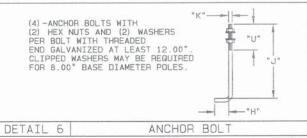
ITEM QTY.	POLE TUBE			POLE BASE			ANCHOR BOLT				LUMINAIRE ARM						
	QTY.	BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THK. (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	HOLE / SLOT "Z" (IN)	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)	ARM SPAN "L" (FT)	RISE HEIGHT "R" (FT)	PIPE DIA. (IN)	WALL THK. (IN)
1		7.00	4.76	16.00	0.119	10.88	10.75	1.000	1.13 X 2.00	1.00	36.00	4.00	6.00	1.83	0.78	2.38	0.154
2		7.00	4.76	16.00	0.119	10.88	10.75	1.000	1.13 X 2.00	1.00	36.00	4.00	6.00	4.00	2.00	2.38	0.154
3		7.00	3.92	22.00	0,119	10.88	10.75	1.000	1.13 X 2.00	1.00	36.00	4.00	6.00	1.83	0.78	2.38	0.154
4		7.00	3.92	22.00	0.119	10.88	10.75	1.000	1.13 X 2.00	1.00	36.00	4.00	6.00	4.00	2.00	2.38	0.154
5		7.00	3.92	22.00	0.119	10.88	10.75	1.000	1.13 X 2.00	1.00	36.00	4.00	6.00	6.00	2.00	2.38	0.154
6		8.00	4.01	28.50	0.119	10.88	10.75	1.000	1.13 X 2.00	1.00	36.00	4.00	6.00	4.00	2.00	2.38	0.154
7		8.00	4.01	28.50	0.119	10.88	10.75	1.000	1.13 X 2.00	1.00	36.00	4.00	6.00	6.00	2.00	2.38	0.154

TYPE LS101









7.25"
TALL

17.00" D.D.

ALTHOUGH RARE, VIBRATIONS SEVERE ENOUGH TO CAUSE DAMAGE CAN OCCASIONALLY OCCUR IN STRUCTURES OF ALL TYPES. BECAUSE THEY ARE INFLUENCED BY MANY INTERACTING VARIABLES, VIBRATIONS ARE GENERALLY UNPREDICTABLE. THE USER'S MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATION FOR EXCESSIVE VIBRATION AND EXAMINATION FOR ANY STRUCTURAL DAMAGE OR BOLT LOOSENING. THE VALMONT WARRANTY SPECIFICALLY EXCLUDES FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE PRODUCT.

