In Case Of Electrical Difficulty

Subject: H.I.D. Luminaires

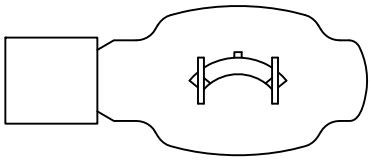
This luminaire has been thoroughly tested at the factory prior to shipping. First the unit was subjected to a high potential test which subjects all electrical components to an AC voltage exceeding 1000 volts between live parts and dead metal parts. Any weak insulation or "shorts to ground" is detected by this test.

The luminaire was then connected to the rated input voltage and correct lamp load and subjected to a performance test to determine if the ballast is operating the lamp within the correct parameters. Should difficulties be encountered, please go through the following check list as this luminaire was in working order upon leaving our factory:

A. Problem: Lamp Will Not Start
1. Is power applied to luminaire?
2. Is lamp seated in socket properly? (See Paragraph #2 under Item C.)
3. Is lamp of correct wattage and type?
4. Is lamp defective? Try lamp known to be in operating condition.
5. Check lamp markings and determine if lamp is intended for burning in the position in which it is being used, i.e., vertical or horizontal.
6. Is photocontrol functioning properly (if used)?
7. Does voltage measured at socket agree with the minimum required indicated in chart?
8. If no voltage appears at the lamp socket, check supply wire connections.
9. Check voltage at supply connections. Is it within ±10% of rated fixture voltage?
10. Open luminaire and determine if all connections are secure.

B. Problem: Irregular or Difficult Lamp Starting
1. Numerous causes could exist here. We suggest that under A above, Items 2, 3, 4, 5, 7, 9 and 10 be checked. Ballasts are designed to start lamps at temperatures down to minus 20°F. In some rare instances, outside temperatures could be a problem in certain areas.

C. Problem: Lamp Cycles
This condition is evidenced by the lamp repeatedly warming up, then extinguishing, then warming up again.
1. Check under A above, Items 2, 3, 4, 5, 6, 7, and especially 9.
2. If 175 watt or 400 watt Super Metalarc lamps are used (Horizontal Lamp Luminaires only) it is imperative that the arc tube be positioned so that the arc points vertically upward (see illustration) with the luminaire in the installed position. Should the arc tube be over 4 deg. in either direction, lamp cycling will very likely result. This lamp is provided with a stop-pin located on the screw shell which engages a notch on the screw shell of the specially constructed lamp socket provided. This notch will be on the left side (9 o'clock position) when standing looking into the mouth of the socket with the luminaire in its installed position and viewer standing erect on a ladder or other support.



SUPER METAL ARC LAMP

Should the luminaire still not operate correctly after checking the above items, report the problem to the distributor through which the luminaire was sold.

MINIMUM OPEN CIRCUIT VOLTAGE FOR VARIOUS H-I-D LAMPS

LAMP TYPE	WATTAGE	MINIMUM SOCKET VOLTAGE
METAL HALIDE	1000	410
	750	280
	400	295
	250	280
	175	295
	100	275
	70	230
	50	230
HIGH PRESSURE SODIUM	1000	456
	750	280
	400	195
	360*	225
	310	190
	250	195
	200	195
	150/55V	110
	150/100V	195
	150**	225
	100	110
	70	110
	50	110
MERCURY VAPOR	1000	375
	400	225
	250	225
	175	225
	100	225

*360W Unalux® designed to operate on 400W Mercury Vapor Lag Type Ballast only

**150W Unalux® or E-ZLUX® designed to operate on 175W Mercury Vapor Lag Type Ballast only

CAUTION

USE CLEAR LAMP ONLY FOR OPTIMUM PHOTOMETRIC PERFORMANCE

PHILIPS

Reflector Orientation

Proper performance of your lighting system depends, among other factors, on the reflector being oriented in the correct position as should be indicated on your site plan.

Figure 1. Identifies all Gardco reflectors as to distribution type and orientation direction as viewed from the bottom of the luminaire looking through the lens into the reflector.

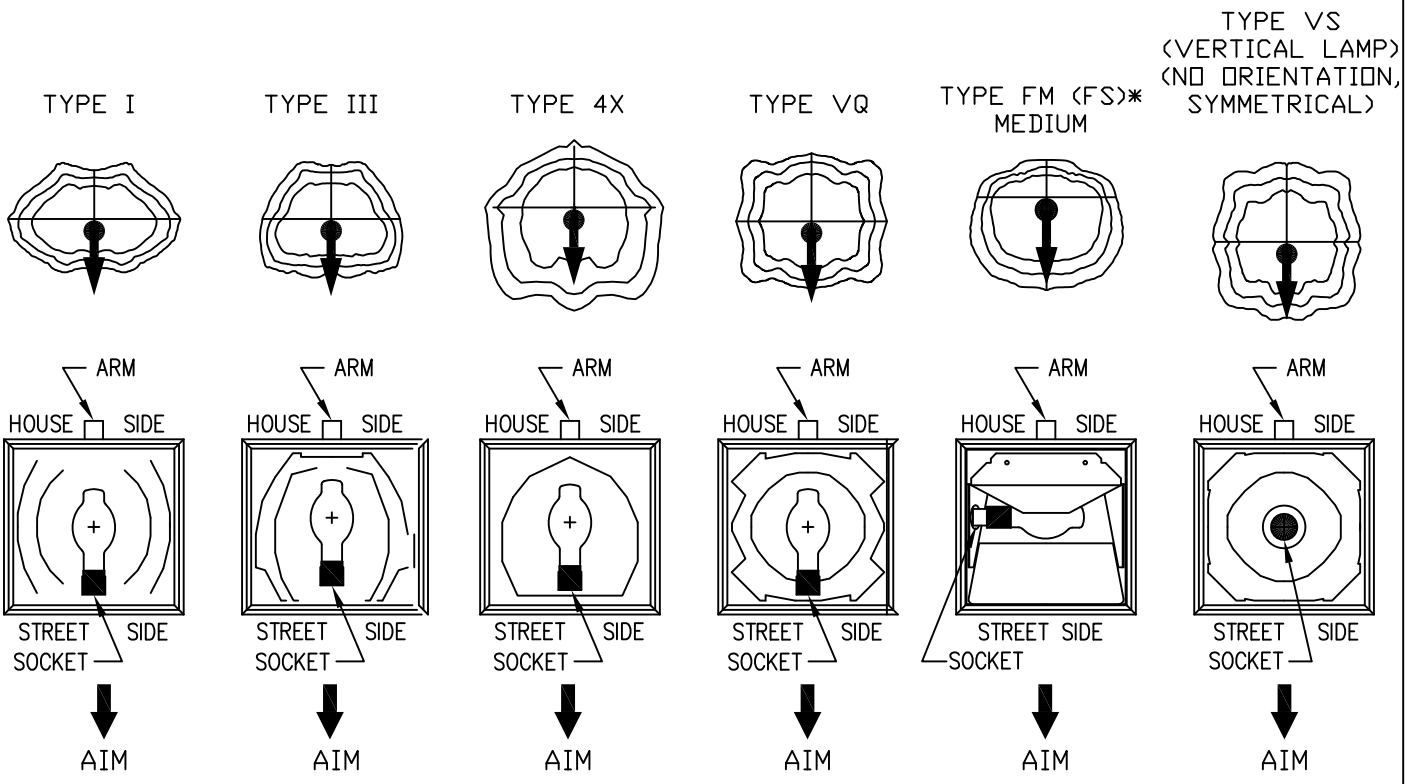
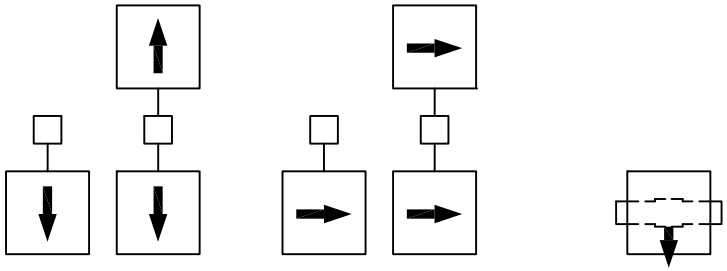


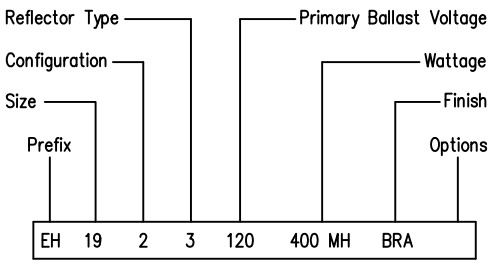
Figure 2. Illustrates typical site plan luminaire symbols, viewed from above, as they would appear on a site plan. When orientation direction arrow is omitted, assume reflector is to be mounted in the "standard position."



Standard Position | 90° from standard position | Standard Position

Post top yoke mounted luminaires

Figure 3. Product I.D. label located on socket identifies type of luminaire, reflector type, lamp source, and wattage.



Product I.D. Label Located On Socket

All luminaires are shipped from the factory with reflectors installed such that the orientation direction is in the "standard position."

Should your site plan require an orientation different from "standard," simply remove the lens and reflector per the installation and servicing instructions and re-orient in the desired position. Make sure the lens is reinstalled so it hinges on the side opposite (across from) the side on which the reflector hinges. Hinge side of lens door is Identified as side having single latch release tab on inside top of the door.

* Luminaires are shipped from factory as standard FM distribution. FS distribution is accomplished by moving cutoff shield to forward position.

PHILIPS

Philips Lighting North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873, USA

Philips Lighting Canada Ltd.
281 Hillmount Road,
Markham ON, Canada L6C 2S3