

FHWA REGION NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NUMBER	TOTAL SHEETS
X	KANSAS	X	X		X

**Vintage LIGHTING COLLECTION**  
**CORONADO TEAR DROP LUMINAIRE WITH LIFI® LIGHTING SYSTEM**

**How LIFI® Light Sources Work**

LIFI® is a new class of high intensity light source of solid state design bringing clean lighting solutions to general and specialty lighting. With energy efficiency, long useful lifetime, full spectrum and dimming, LIFI® lighting applications work better compared to conventional approaches.

**LIFI® Construction**

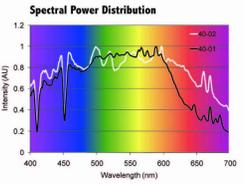
The LIFI® STA Product consists of the 2 primary sub-assemblies:

- Lamp / Emitter Housing
- RF Driver

The solid-state, micro-controlled RF Driver has a 28VDC input (< 10A) and converts that to RF to drive a very small quartz bulb. The sealed quartz bulb (which has no electrodes or connection wires) is contained in a "resonant cavity" (puck) that acts as a "focusing lens" for the RF energy to vaporize the contents within it. This forms a stable plasma in the center of the bulb. Both the Emitter Housing and RF Driver are enclosed in separate aluminum enclosures.

**Function of the Lamp Sub-Assembly**

At the heart of LIFI® is the lamp-assembly where a sealed lamp is embedded in a dielectric material. This design is more reliable than conventional light sources that insert degradable electrodes into the lamp. The dielectric material serves two purposes; first as a waveguide for the RF energy transmitted by the driver and second as an electric field concentrator that focuses energy in the lamp. The energy from the electric field rapidly heats the material in the lamp to a plasma state that emits light of high intensity and full spectrum.



**Key Benefits of LIFI® Lighting System**

- 22,000 total initial lumens
- 5,100 CCT
- Dimming range down to 65%
- Input voltage - 28 volts DC
- Inventing, comfortable nighttime environment - 95 color rendering
- Easy maintenance - 30,000+ hours lifetime
- Reduce energy costs - 120 lm/W+ directional source
- Dimmable system compatible with smart lighting management systems
- Reduce environmental costs - small source size, less material
- Minimize glare and stray light
- Digitally controlled and easy to use

Light Source	Efficacy (lm/W)	CRI	Lifetime (hrs.)
LIFI®	120	95	30,000
Metal Halide	85	75	20,000
Ceramic Metal Halide	100	90	15,000
LED	70	75	50,000
High Pressure Sodium	125	20	24,000
Low Pressure Sodium	180	<20	16,000

The product shown is in the final stages of development and represents a beta sample to demonstrate the superior features of the system being developed. Working samples and saleable product will be available by mid-2009.

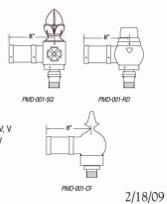
LIFI® is a registered trademark of LUXIM® Corporation.

**Ordering Chart**

MODEL NUMBER	LENS	LAMP High Pressure Sodium	LAMP Metal Halide	LAMP LIFI®-Plasma	VOLTS
CORO	ACR-Acrylic POLY-Polycarbonate SG-Short Glass DG-Deep Glass	70S, 100S, 150S, 200S, 250S, 400S	70MH, 100MH, 150MH, 175MH, 250MH, 400MH	Equivalent to 400MH (requires AC/DC converter - supplied with product)	120, 208, 240, 277 MT 480 ST 347 ST

Mounting	Electrical	Finish	Optical
NIP=Threaded Nipple SUN=Aluminum Skirt	PC=Photo Control Button FS=Fuse, single FD=Fuse, double MT=Multi-Tap Ballast IND=Induction Lamp PLSM=LIFI® Plasma Lamp	BK=Black Powder Coat (Standard) GR=Green B2=Bronze VP=Verde Patina PP=Peewee Patina SM=Silver Metallic WH=White AL=Almond CC=Custom Color	GLD=Deep Borosilicate Glass III, IV, V GLS=Short Borosilicate Glass III, V POLY=Polycarbonate Deep III, V POLY=Polycarbonate Short III, V ACR=Acrylic Deep III, V Acrylic Short III, V

**Luminaire Mounting Devices**



**Vintage LIGHTING COLLECTION**  
**CORONADO TEAR DROP LUMINAIRE with Patent-Pending Reflector System**  
 This vintage-inspired fixture is often associated with the "original street lighting" that was seen accenting roadways in the early 1900's. This maintenance-friendly fixture is also designed with superior glass optics with precise control for a glare-free performance in any lighting locale.

**FEATURING THE LIFI® LIGHTING SYSTEM**  
 SEE REVERSE FOR DETAILS

**Luminaire**  
 The fixture's housing is made of 319 cast aluminum with a minimum 3/16" to 1/4" thickness throughout and encloses a specular, fluted aluminum reflector that works in conjunction with the borosilicate glass refractor for superior optics.  
 The lens is made of prismatic borosilicate glass and available in IES type II, III, IV, or V distribution, as well as polycarbonate or acrylic, deep and short.

**Optical Assembly**  
 The reflector housing encloses a fluted aluminum reflector that works in conjunction with the glass refractor for superior optical performance. The refractor is clamped and slotted into the hinged door bezel that attaches to the reflector housing with a steel captive wing nut for simple and tool-less entry.

**Electrical Components**  
 The hinged top entry housing is equipped with a leveling knuckle for mounting, and locked into place with stainless steel screws after installation. A terminal block and quick disconnect plugs make for easy installation. The ballast housing hinges down from the top entry housing for wiring and maintenance of ballast, which is attached to a mounting plate opposite the socket, for easy removal. The porcelain, mogul base socket is 4KV rated for use with high power factor ballasts and high voltage.

**Patent Pending**  
 The use of the LIFI® system in conjunction with the reflector and glass refractors have been optimized to yield IES type III and IV.

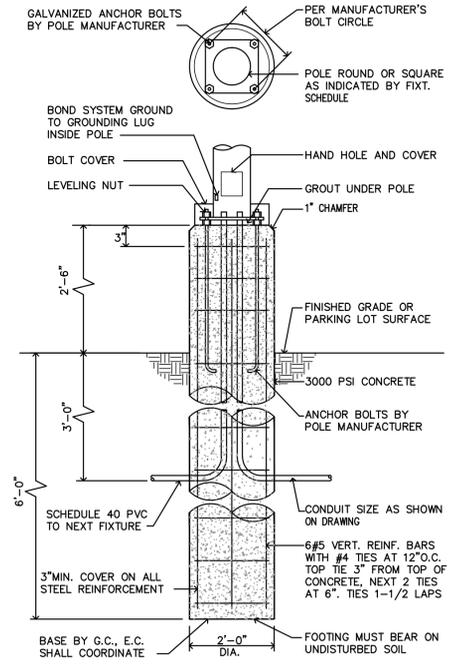
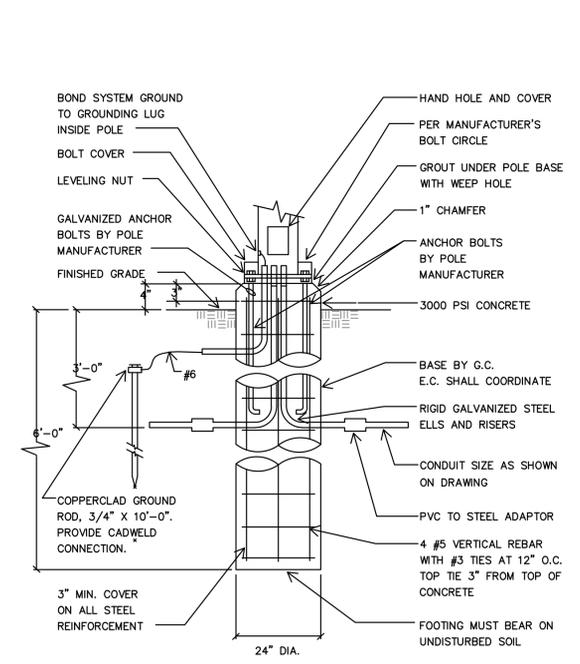
**Finish**  
 The fixture is finished with an electro-statically applied polyester powder over a nine-stage pretreatment, cleaning, and sealing process. This is currently the best known pretreatment process for aluminum materials in terms of both corrosion resistance and paint adhesion.

**EPA: 2.37 Weight: 66 lbs**  
**2 Year Limited Warranty**  
 UL / ETL / CSA Listed for Wet Locations

**Typical Components**

Shown (left): Coronado fixture (with deep glass refractor) on decorative aluminum arm and fluted pole with cast aluminum base.

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**LIGHT FIXTURE SD**

**LIGHT FIXTURE & POLE SCHEDULE**

FIXT LTR	MANUFACTURER	CATALOG NUMBER	LAMPS		FIXT. VOLT.	FINISH	MOUNTING	REMARKS
			NO.	TYPE				
SD	PEMCO	CORO-II-LG3-175PSM-MT-BK PLA-181-MCD-BK ARAL 6320-R15/11-BK-2XP-G1/PL8000 POLE	1	175W MH	UNV	BLACK	20' POLE	



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**ELECTRICAL CUT SHEETS**  
**I-135 NORTH BIKE PATH**  
**WICHITA, KANSAS**

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DRAWING FILE PROJECT NUMBER DATE OCT 13, 2010

DESIGN ICE  
 DRAWN ICE  
 REVIEW ICE  
 UTILITY ICE  
 DATE OCT 13, 2010

REB JOB 3134E  
 SHEET E-2  
 OF 6