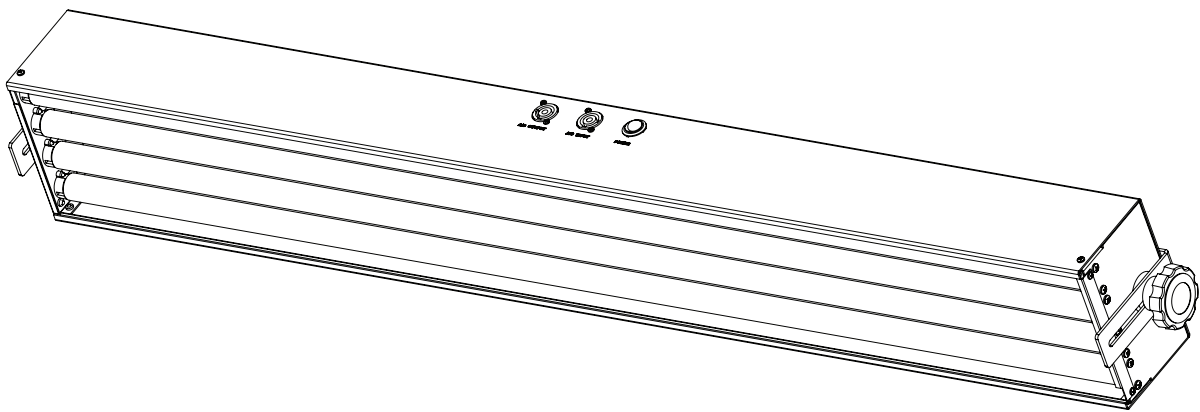


# Operation Manual

*Ultraviolet Fluorescent Lighting Fixtures*

**EM-44V**



**EFFECTSMASTER**<sup>®</sup>  
BY WILDFIRE<sup>®</sup>

# Table of Contents

<b>Introduction</b>	3
<b>Safety Information</b>	3
<b>Specifications</b>	4
<b>Setup and Operation</b>	5
Unpacking	5
Optional Accessories	5
Setup	5
<b>Maintenance &amp; Troubleshooting</b>	6
Lamp Replacement	6
Cleaning	6
Troubleshooting	6
<b>Diagrams</b>	7
Isometric & Line Views	7
Exploded View & Part List, EM-42E	8
Exploded View & Part List EM-43E	9
Schematic, EM-42E	10
Schematic, EM-43E	11
Spectral Output Graph	12
Photometrics Chart	12
<b>UL Listing Certificate</b>	13
<b>Limited Warranty</b>	14

## Introduction

Congratulations on your purchase of an Effects Master Energy Series Fixture by Wildfire. These powerful and versatile ultraviolet fluorescent lighting fixtures feature F32T8BLB lamps, polished Everbrite reflectors and state of the art electronic universal voltage ballasts. Each Effects Master Fixture is precision engineered to provide you with years of trouble-free service. Please take a moment to read this manual thoroughly before attempting to operate this fixture. Improper set-up use or servicing may cause damage to the fixture and/or lamps and void the unit's warranty.

## Safety Information

**CAUTION** – THIS FIXTURE IS TO BE OPERATED IN ACCORDANCE WITH THE WAY IT WAS DESIGNED AND TESTED. OPERATE IN DRY INDOOR LOCATIONS ONLY. USE WITH MAX 32W T8, LAMPS ONLY. SUITABLE FOR SURFACE MOUNTING ONLY.

Designed, Engineered and Built in the USA

# Specifications

**Housing:**

16 Ga. Rolled steel with stainless steel hardware

**Finish:**

Flat black powder coat

**Mounting:**

Two fully adjustable L brackets

**Reflector:**

Polished Everbright aluminum 165°

**Sockets:**

Four or six positive locking medium Bi-Pin G13

**Ballast:**

Electronic HO Universal Voltage

**Input Voltage:**

120-250VAC

**Input Current:**

1.0A Max

**Frequency:**

50-60Hz.

**Power Factor:**

0.98

**Power Consumption**

EM-42E: 88W

EM-43E: 108W

**Operating Temperature:**

50° F to 100° F

**Power Cord:**

8' 16/3 SOW with PowerCON and male Edison

**Power Input Connection:**

Neutrik PowerCON

**Power Output Connection:**

Neutrik PowerCON, Max 4.0A

**Lamps:**

EM-42E: Two F32T8BLB (Not Included)

EM-43E: Three F32T8BLB (Not Included)

**Peak Spectral Output:**

368nm With Wildfire SableLux Lamps Installed.

**Lamp Life:**

12,000 Hrs. With Wildfire SableLux Lamps

**Dimensions:**

4.25"/10.79cm High x 5.00"/12.44cm Wide x 51.37"/130.48cm Long

**Weight:**

15.05 lbs./6.82kg.

**IP Rating:**

IP-20 Indoor use

**Listing:**

UL / CUL

**Standard Equipment:**

Adjustable Mounting Brackets

**Optional Accessories:**

Twenty Clamp (147-021)

Safety Cable (147-002)

Floor Mount (147-006)

UVT Protective Lens Kit (138-011)

# Setup & Operation

## Unpacking

Unpack the fixture and carefully inspect it for any signs of physical damage. Report any damage to Wildfire or your local distributor immediately. Included with each unit should be the following items:

1. Power Cord
2. PowerCON power output cable connector (used to power link additional fixtures)
3. Operation Manual
4. Warranty Card

## Optional Accessories:

**Twenty Clamp** – These clamps when attached to both of the fixtures adjustable mounting brackets allows you to mount the fixture to a standard 2” pipe truss. Contact Wildfire or your local distributor for pricing.

**Safety Cable**- This cable is to be used when installing the fixture on a pipe truss with the Twenty Clamps. It attaches to the adjustable brackets on the sides of the fixture securing it from falling if the clamp is not tightened properly. Contact Wildfire or your local distributor for pricing.

**Floor Mount Kit**- This aluminum stand set enables you to mount your fixture on the floor for footlight applications. Contact Wildfire or your local distributor for pricing.

**T-Bar Ceiling Mount**- These brackets enable you to mount your Effects Master fixture to the t-bars in a standard drop ceiling. Contact Wildfire or your local distributor for pricing.

**UVT Protective Lens Kit** - This kit consists of an acrylic plastic lens that slides into the housing to protect the lamps. Included in this kit are two small brackets that mount on either end of the fixture holding the lens in place. This protective lens is made from a special UV transmitting plastic and is designed not to yellow or become brittle under normal operating conditions. Contact Wildfire or your local distributor for pricing

## Setup

The first step is to install the lamps in the fixture. Refer to Lamp Replacement on page 5 for correct installation.

Connect the blue PowerCON connector on the power cord to the blue PowerCON AC Input receptacle on the fixture. The fixture is also provided with a gray PowerCON AC Output receptacle, enabling you to interconnect power between fixtures. **Do not connect more than 4.0A Max to the PowerCON AC OUT connector.**

Plug the fixture into the appropriate properly grounded power source. If you are controlling the unit with a lighting control board you will need to make sure it is plugged into a non-dim circuit. **Do not at any time plug the fixture into a dimmable circuit, doing so will damage the ballast in the fixture and void the warranty.**

## Operation

To turn the fixture on switch the rocker switch on the side of fixture to the ON position. Unplug the fixture from the AC power outlet during prolonged periods of non-operation.

## Maintenance & Troubleshooting

### Lamp Replacement

Refer to Fixtures Specifications on page 4 for information on selecting the proper replacement lamp for your fixture. Unplug the fixture. If this is not possible then steps should be taken that would allow the fixture to remain in an off state while re-lamping. If your Effects Master is equipped with The UVT protective lens or Transverse Louver option, this will need to be removed first before replacing the lamps. To remove the protective lens, first determine which end is easiest to slide the lens from the unit. Looking at that end, locate the two Phillips screws that hold the lens-retaining bracket to the side of the fixture. Using a Phillips screwdriver, loosen the two screws that hold the bracket in place. (Do Not Remove the Screws). Once the two screws are loose, the bracket will slide out from under the screw heads. Now that the bracket is removed, slide the protective lens out of the housing. Holding the lamp firmly with two hands, one hand near each end of the lamp, rotate the lamp about its long center-line axis, one quarter (1/4) turn either clockwise or counter-clockwise. The sockets will click and the lamp will become loose. Gently lift the lamp free of the sockets. Install the new lamp by lining up the two pins on the ends of the lamp so that they will slide into the open slot in the lamp holder. Gently set the lamp into the sockets until the lamp pins rest on the lamp socket. Gently turn the lamp one-quarter (1/4) turn either clockwise or counter-clockwise, until the lamp socket makes a small click, or you feel a detent position. Gently lift up on the lamp to make sure that both ends of the lamp are installed correctly, neither end of the lamp should move in the socket.

### Cleaning

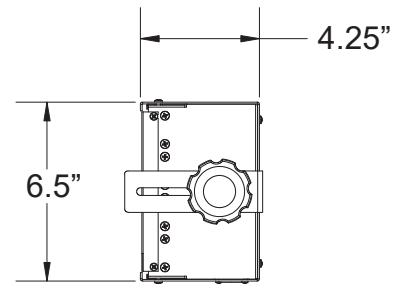
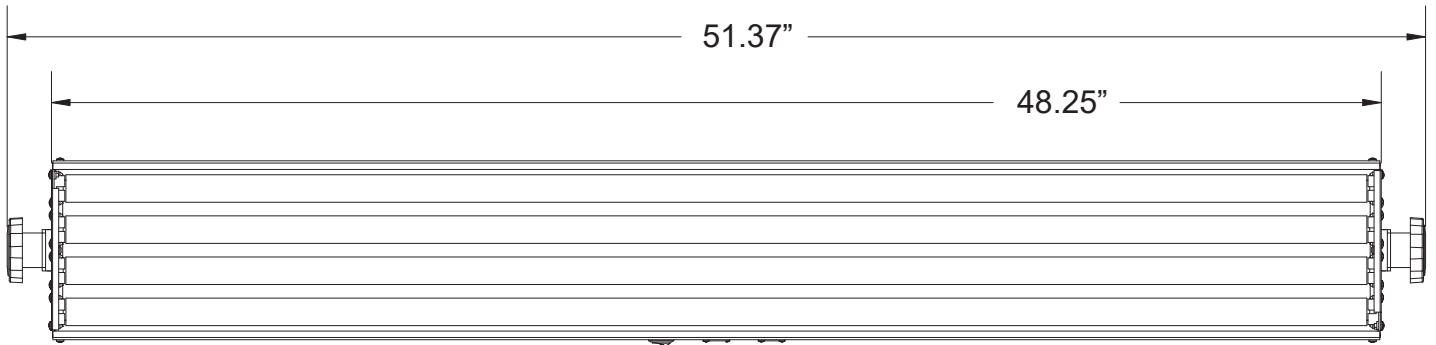
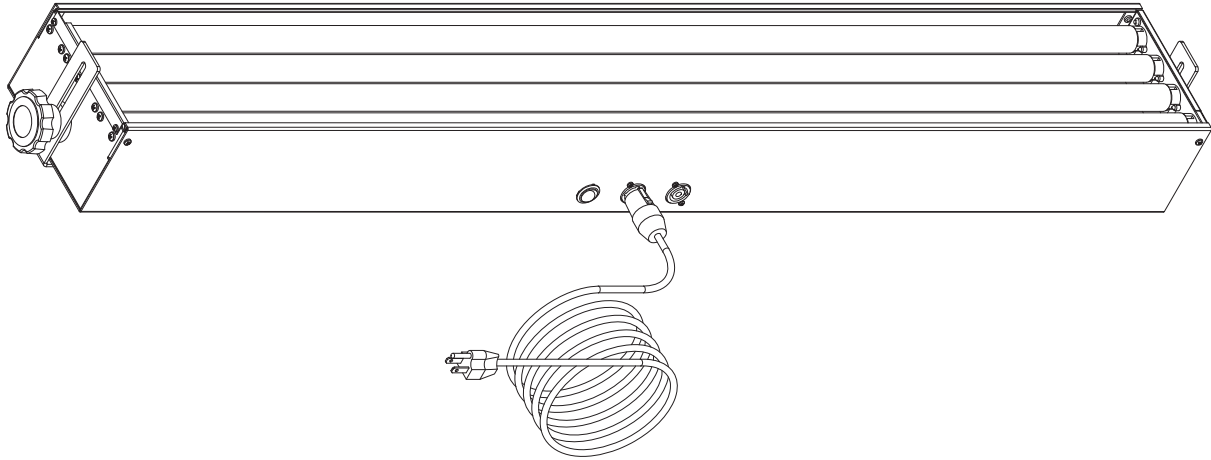
For best performance, the reflector, lamps and protective lens should be kept free of dirt and dust. At no time should any cleaning chemicals or abrasives be used to clean any part of the unit. For normal cleaning, a dry soft cloth should be used to wipe any surface free from dust and light dirt. Cleaning the reflector will require that the lamps be removed. Remove lamps by following the instructions listed under Lamp Replacement above. Always unplug the unit before cleaning. Once the lamps have been removed, gently wipe off the reflector using a soft dry cloth. In the event the reflector is heavily soiled, lightly dampen the cloth with a mild window cleaning agent and wipe. Lamps should be cleaned using the same method; first use a dry soft cloth and then proceed with a window-cleaning agent if lamp is too heavily soiled. Do not spray or apply any liquid directly to any part of the fixture.

### Troubleshooting

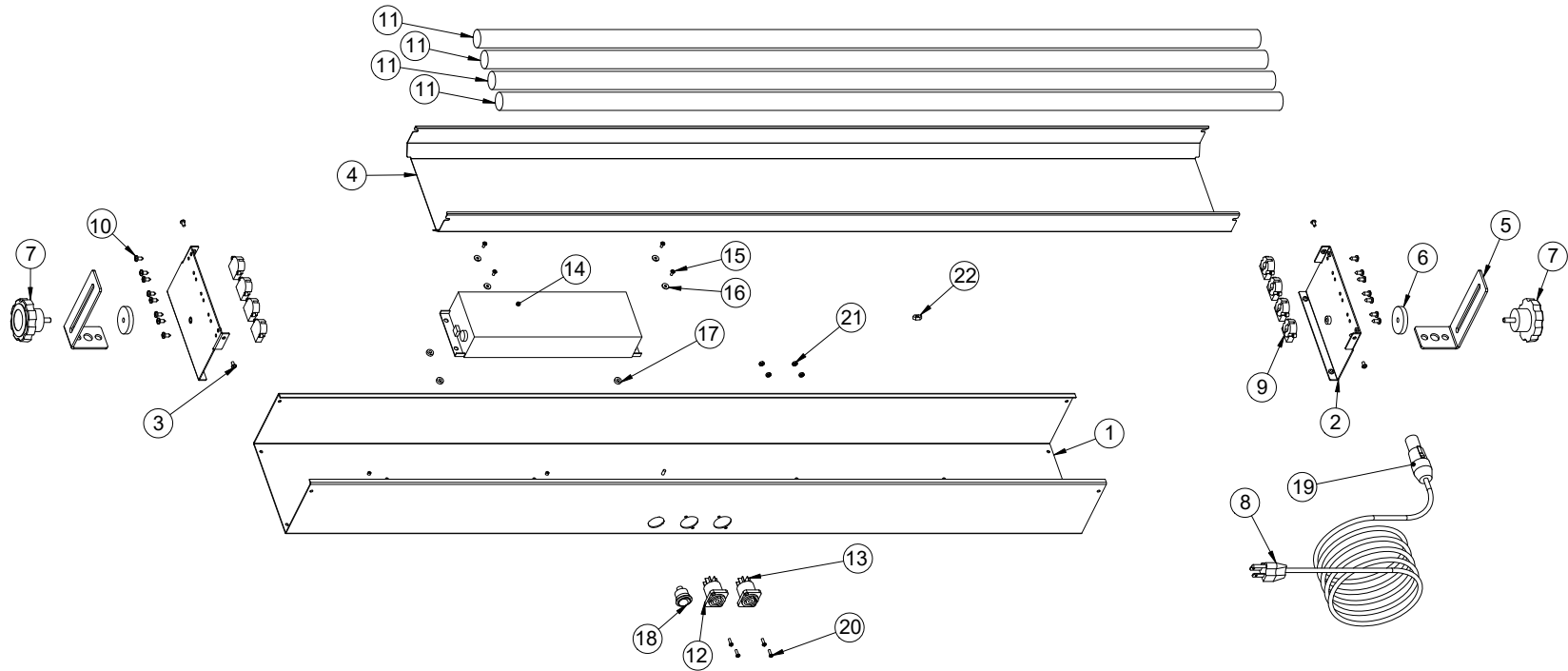
Other than the lamps, there are no user serviceable parts in the fixture.

# Diagrams

## Isometric & Line Views



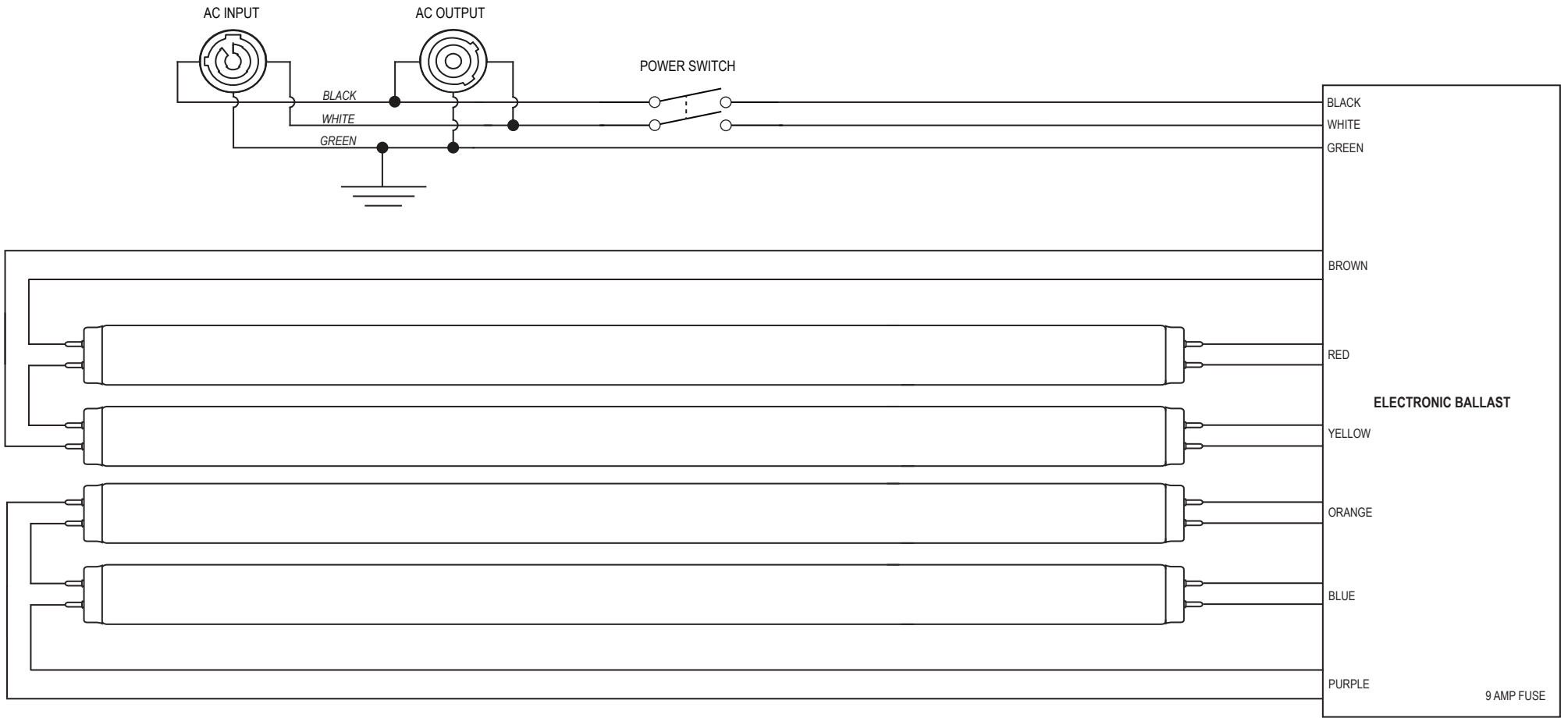
## Exploded View & Part List



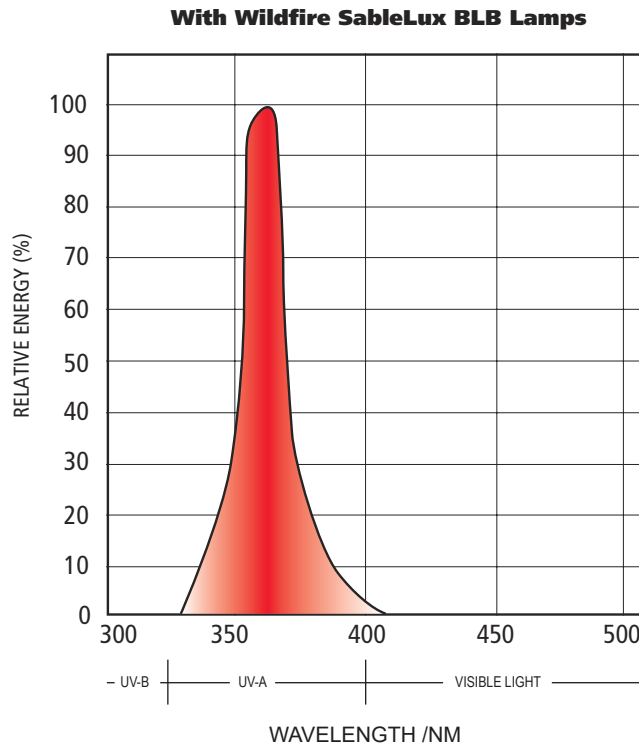
#	QTY.	PART #	PART NAME	#	QTY.	PART#	PART NAME
1	1	104-066-05	Housing Effects Master VHO	12	1	106-051	Receptacle, PowerCON 1, Power-In NAC3MPA-1
2	2	104-060-03	Cover Housing Side VHO	13	1	106-053	Receptacle, PowerCON 1, Power-Out NAC3MPB-1
3	8	121-005	Screw, M, PHL, PH, 6-32 x 1/4" 18-8 SS	14	1	110-007 to 010	Ballast, (120V)(220V)(100V)(277V)
4	1	126-002-03	Reflector 4' Fluorescent, VHO	15	4	121-001	Screw, M, PHL, PH, 4-40 x 1/4" 18-8 SS
5	2	104-003-03	Bracket, Mounting	16	4	121-056	Washer, Flat, 5-16 OD
6	2	121-051	Washer, Neoprene, 1.5"OD .25"ID .2" THK BK	17	4	121-066	Spacer, Nylon, 3/8" OD, #8 ID, .125" thk.
7	2	120-002	Knob, Bracket Adjustment	18	1	105-020	Switch, DSPT, 15A, Effects Master Series RRA12C1100
8	1	107-003	Cord, Power, Black, 16 AWG, 8'	19	1	106-050	Connector, PowerCON 1, Power-In NAC3FCA
9	8	108-004	Socket, Lamp G13 Base	20	4	121-003	Screw, M, PHL, PH, 4-40 x 3/8" 18-8 SS
10	16	121-017	Screw, SM, PHL, PH, #8 x 3/8", 18-8 SS	21	4	121-034	Nut, Nylock, 4-40, 18-8 SS
11	4	141-002	Lamp, SableLux Fluorescent, 4'	22	1	121-035	Keprnut 6/32 18-8 SS



# Schematic, EM-44V



## Spectral Output Graph



## Photometrics Chart

**Model EM-44V With SableLux Lamps**

Distance in Feet / Meters, MF: 2.97

	<b>5 / 1.52</b>	<b>10 / 3.05</b>	<b>20 / 6.10</b>	<b>30 / 9.14</b>	<b>40 / 12.19</b>	<b>50 / 15.24</b>	<b>60 / 18.29</b>
Beam Angle Feet	14.8	29.7	59.4	89.1	118.8	148.5	178.2
Beam Angle Meters	4.5	9.0	18.1	27.1	36.2	45.2	54.3
Peak UV-A Irradiance mW/m <sup>2</sup>	1,980	495.0	123.7	55.0	30.9	19.8	13.7

All peak UV-A irradiance measurements taken at center beam using UVX Digital Radiometer and a calibrated 365nm sensor

## Wildfire Lighting Three Year Limited Warranty

Wildfire Lighting warrants to the original owner or retail customer, that for a period of three years from the date of delivery of any Wildfire Fixture; whether used in a portable or permanent installation, such fixtures will be free from defects in material and workmanship under normal use and conditions.

Warranty does not cover any product or part of a product that has been subjected to accident, negligence, alteration, abuse or misuse and excludes any accessories or parts not supplied by Wildfire. Warranty does not cover expendable parts such as fuses, lamps, glass or any components warranted directly to the owner by the original manufacturer. This warranty does not extend to products not manufactured by Wildfire.

Wildfire's responsibility under this warranty shall be to repair or replace at Wildfire's discretion such parts as determined to be defective upon Wildfire's inspection. Wildfire will not assume any responsibility for any labor expended or materials used to repair any equipment without Wildfire's prior written authorization.

Wildfire, Inc. shall not be responsible for any incidental, general or consequential damages to property, damage for loss of use, time profits or income, or any other charges.

The owners' obligation during the warranty period is to notify Wildfire of any suspected defect, to obtain a return authorization number, and to return the product freight and insurance prepaid to the following address:

**Wildfire Lighting 2908 Oregon Court Suite G1, Torrance, CA 90503  
(800) 937-8065 (310) 755-6780**

Collect shipments for freight allowances or shipments without return authorization numbers will not be accepted.

**THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER OBLIGATIONS AND LIABILITIES ON WILDFIRE'S PART. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THE OWNER ACKNOWLEDGES THAT NO OTHER REPRESENTATIONS WERE MADE TO HIM WITH RESPECT TO THE QUALITY AND FUNCTION OF THE GOODS SOLD.**

This written warranty is intended as a complete and exclusive statement of the terms thereof. Prior dealings or trade usage shall not be relevant to modify, explain or vary this warranty. Acceptance of, or acquiescing in, a course of performance under this warranty shall not modify the meaning of their agreement even though either party has knowledge of the performance and a chance to object.

This limited warranty gives you specific legal rights and you may also have other rights which vary from state to state. If any action or preceding results from this warranty, the prevailing party will be entitled to all costs and attorney fees incurred in defending or prosecuting such actions.



**2908 Oregon Ct. Suite G1, Torrance, CA 90503**  
**P: 310-755-6780 800-937-8065 F: 310-755-6781**  
***wildfirelighting.com mail@wildfirelighting.com***

© 2019 Wildfire, Inc.