

EMERY™ 45 DEGREE 24V Linear Lighting Fixture

A durable fixture for angled illumination.

Date _____

Project Notes _____



FEATURES	MECHANICAL DIAGRAM
<ul style="list-style-type: none"> Angle mounted profile Assembled in the USA Multiple output options Four lens options IP20 (Indoor / Damp location) Closet rated SS: 12 Year Warranty / VE & STD: 7 Year Warranty 	



ORDERING CODES

Order customized fixture								Options 9 - 13 are not required to create a fixture.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Product	Finish	Rating	Performance	W/ft.	CCT	Lens	Fixture Length	Exact / Optimal	Input Wire Length	Input Wire Color, Type & Connection	Output Wire Length	Output Wire Color, Type & Connection	Mounting
DI													

1 PRODUCT

EMERY-45
(EMERY™ 45 DEGREE)

2 FINISH

AL
(Aluminum)

BL
(Black)

WH
(White)

3 RATING

DRY
(Indoor / Damp Location)

4 PERFORMANCE

SS	STD	VE
CRI: 95+ R9: 90+ Fidelity: 103 Gamut: 95	CRI: 90+ R9: 65+ Fidelity: 90 Gamut: 98	CRI: 90+ R9: 55+ Fidelity: 99 Gamut: 88 BAA & BABA Compliant

5 W/FT.

1	0.9	3.3
1.9	1.72	5
2.8	2.55	
4.6*	4.28*	
7.2*		

6 CCT

20+ (2000K)	20+ (2000K)	24 (2400K)
35 (3500K)	40 (4000K)	35 (3500K)
40 (4000K)	50 (5000K)	27 (2700K)
24 (2400K)	63 (6300K)	40 (4000K)
50 (5000K)	30 (3000K)	50 (5000K)
27 (2700K)		
63 (6300K)		

7 LENS

FR
(Frosted)

CLT
(Architectural Clear)

FRT
(Architectural Frosted)

BL
(Black)

8 FIXTURE LENGTH

__ in.

Fixture length min 6 in., max 96.25 in. (including end caps)

9 EXACT / OPTIMAL

O
(Optimal - Default)

E
(Exact)

10 INPUT WIRE LENGTH

96
(96 in. - Default)

__ in. __ cm.

__ ft. __ m.

*Maximum wire length:
240 in. 609.6 cm.
20 ft. 6.09 m.*

11 INPUT WIRE COLOR, TYPE & CONNECTION

COLOR & TYPE	INPUT	CONNECTION
AW (White CL2 - Default)	A (Straight - Default)	1 (Bare Wire - Default)
AB (Black CL2)		2 (Barrel)
AS (Silver Plenum - Bare Lead only)		3 (Interconnect)

12 OUTPUT WIRE LENGTH

blank
(No Wire - Default)

__ in. __ cm.

__ ft. __ m.

*Maximum wire length:
240 in. 609.6 cm.
20 ft. 6.09 m.*

13 OUTPUT WIRE COLOR, TYPE & CONNECTION

COLOR & TYPE	OUTPUT	CONNECTION
blank (No Wire - Default)	*blank* (No Wire - Default)	*blank* (No Wire - Default)
BW (White CL2)	A (Straight)	1 (Bare Wire)
BB (Black CL2)		2 (Barrel)
BS (Silver Plenum - Bare Lead only)		3 (Interconnect)

14 MOUNTING

HNG
(Hanging Hardware)

MC
(Mounting Clip)

RC
(Rotating Clip)

VC
(Vertical Clip)

* Some wattages may not be available with certain CCTs. Reference Performance Chart on page 2.

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SS Performance

Wattage	CCT	Frosted	Arch Clear	Arch Frosted	Black
1 W/ft.	2000K	83	94	73	10
	2200K	83	94	73	10
	2400K	83	94	73	10
	2700K	81	91	71	10
	3000K	85	95	74	11
	3500K	86	97	76	11
	4000K	90	101	78	11
	5000K	93	104	81	12
6300K	90	101	78	11	
1.9 W/ft.	2000K	155	175	136	19
	2200K	155	175	136	19
	2400K	155	175	136	19
	2700K	166	186	145	21
	3000K	174	196	153	22
	3500K	174	196	153	22
	4000K	182	205	160	23
	5000K	194	218	169	24
6300K	195	220	171	24	
2.8 W/ft.	2000K	239	269	209	30
	2200K	239	269	209	30
	2400K	239	269	209	30
	2700K	249	280	218	31
	3000K	258	291	226	32
	3500K	262	295	230	33
	4000K	274	308	239	34
	5000K	292	329	256	37
6300K	290	327	254	36	
4.6+ W/ft.	2000K	-	-	-	-
	2200K	-	-	-	-
	2400K	375	422	328	47
	2700K	396	446	347	50
	3000K	446	501	390	56
	3500K	469	527	410	59
	4000K	427	481	374	53
	5000K	474	533	414	59
6300K	462	520	405	58	
7.2+ W/ft.	2000K	-	-	-	-
	2200K	-	-	-	-
	2400K	584	657	511	73
	2700K	626	704	547	78
	3000K	682	768	597	85
	3500K	725	815	634	91
	4000K	645	725	564	81
	5000K	672	756	588	84
6300K	739	832	647	92	

STD Performance

Wattage	CCT	Frosted	Arch Clear	Arch Frosted	Black
0.9 W/ft.	2000K	74	83	64	9
	2200K	77	86	67	10
	2400K	82	93	72	10
	2700K	92	104	81	12
	3000K	86	96	75	11
	3500K	88	99	77	11
	4000K	86	97	76	11
	5000K	82	93	72	10
6300K	87	98	76	11	
1.72 W/ft.	2000K	153	172	134	19
	2200K	156	176	137	20
	2400K	165	185	144	21
	2700K	177	199	155	22
	3000K	178	200	155	22
	3500K	165	185	144	21
	4000K	167	188	146	21
	5000K	164	185	144	21
6300K	166	187	146	21	
2.55 W/ft.	2000K	228	257	200	29
	2200K	234	263	204	29
	2400K	245	275	214	31
	2700K	260	293	228	33
	3000K	263	296	230	33
	3500K	238	268	209	30
	4000K	250	282	219	31
	5000K	241	271	211	30
6300K	244	275	214	31	
4.28+ W/ft.	2000K	-	-	-	-
	2200K	-	-	-	-
	2400K	405	455	354	51
	2700K	431	485	377	54
	3000K	403	454	353	50
	3500K	405	455	354	51
	4000K	410	461	358	51
	5000K	404	455	354	51
6300K	410	461	358	51	

VE Performance

Wattage	CCT	Frosted	Arch Clear	Arch Frosted	Black
3.3 W/ft.	2400K	200	225	175	25
	2700K	230	259	202	29
	3000K	234	263	204	29
	3500K	228	257	200	29
	4000K	258	291	226	32
	5000K	264	297	231	33
5 W/ft.	2400K	312	351	273	39
	2700K	322	362	281	40
	3000K	327	368	286	41
	3500K	337	379	295	42
	4000K	373	419	326	47
	5000K	380	428	333	48

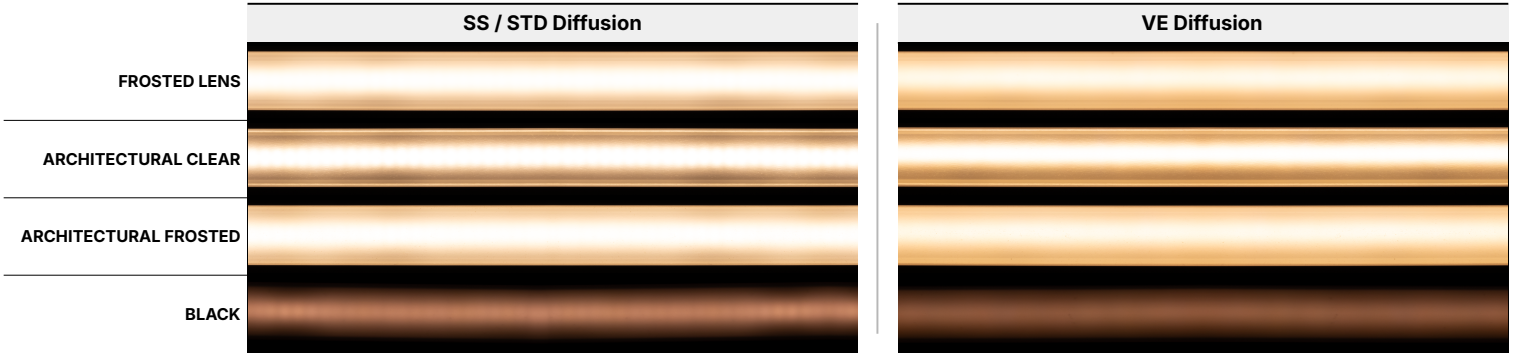
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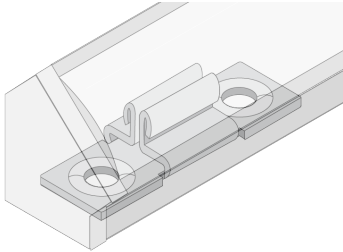


45 Degree FIXTURE DIFFUSION



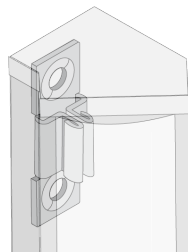
MOUNTING OPTIONS

Chromapath Surface Mount



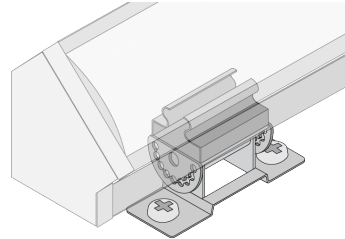
Chromapath Surface Mount Total Dimension
0.61 × 0.82 (H x W)

Vertical Mount



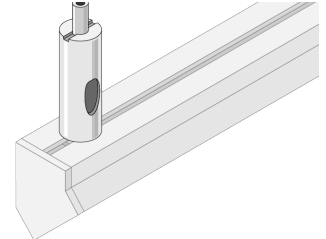
Vertical Mount Total Dimensions:
0.61 × 0.82 (H x W)

Rotating Mount



Rotating Mount Total Dimensions:
1.29 × 0.82 (H x W)

Hanging Mount



Hanging Mount Total Dimensions:
1.51 × 0.82 (H x W)

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RECOMMENDED 24V DRIVERS

SKU	INPUT VOLTAGE / FREQUENCY	OUTPUT VOLTAGE	MAXIMUM LOAD	MINIMUM LOAD	CLASS 2	DIMMABLE	LENGTH	WIDTH	HEIGHT
OMNIDRIVE® X Dimmable Driver OMNIDRIVE® X Dimmable Driver Specification Sheet Versatile driver for most high-performance dimming on ELV, TRIAC, and 0-10V systems. https://www.diodeled.com/custom/download/productFile/filename/omnidrive-x-specification-sheet.pdf/ Contains: • Additional Models • Derating Curves • Additional Features • System Diagrams									
DI-ODX-24V30W-J	120-277V	24V	30W	No Minimum Load	Yes	Yes	6.5 in.	3.7 in.	1.57 in.
DI-ODX-24V60W-J	120-277V	24V	60W	No Minimum Load	Yes	Yes	7.4 in.	3.7 in.	1.57 in.
DI-ODX-24V96W-J	120-277V	24V	96W	No Minimum Load	Yes	Yes	8.66 in.	3.7 in.	1.57 in.
DI-ODX-24V120W-J	120-277V	24V	120W	No Minimum Load	No	Yes	8.66 in.	3.7 in.	1.57 in.
VLM Series Constant Voltage Driver VLM Series Constant Voltage Driver Specification Sheet Compact driver for on/off, PWM dimming, and color-changing applications. https://www.diodeled.com/custom/download/productFile/filename/VLM-Specification%20Sheet%20(Driver%20&%20J-Box).pdf/ Contains: • Additional Models • Derating Curves • Additional Features • System Diagrams									
VLM60W-24	120 / 277VAC 47 - 63Hz	24V	60W	No Minimum Load	Yes	PWM	5.1 in.	0.75 in.	0.77 in.
VLM60W-24-LPS3R	120 / 277VAC 47 - 63Hz	24V	60W	No Minimum Load	Yes	PWM	10.79 in.	7.34 in.	2.36 in.
VLM100W-24	120 / 277VAC 47 - 63Hz	24V	100W	No Minimum Load	Yes	PWM	5.38 in.	1 in.	0.77 in.
VLM100W-24-LPS3R	120 / 277VAC 47 - 63Hz	24V	100W	No Minimum Load	Yes	PWM	10.79 in.	7.34 in.	2.36 in.

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CERTIFICATIONS

Safety

- UL Listed 2108 Low Voltage Luminaires. Certified for United States and Canada. File # E469769.
- Approved for storage areas of clothes closets per NEC 410.16.A.3 and 410.16.C.5

Performance

- Can be used to comply with TITLE 24 Part 6 High Efficacy Lighting LED requirements - JA8-2016-2022-E
- LED chip data measured in accordance to IES LM-80-08.
- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Elemental LED's Innovation Lab.

Safety / Warnings / Disclosures

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
4. Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted. Tape light and attached wire leads are field-cuttable.
5. Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.
6. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
7. Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient Temperature ratings
8. Do not modify product beyond instructions or warranty will be void.
9. Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
10. We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

- Lumen value measured in accordance to IES LM-80-08. LED chips have a luminous flux range with a tolerance of +/- 5%.
- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length. Max run may exceed Class 2 limit. Actual wattage may differ from calculated wattage due to voltage drop across run.
- Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.
- Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value can be calculated as follows: Lumen value divided by average power consumption per foot.
- Operating temperature is measured according to the minimum and maximum ambient temperature environment.

WARRANTY

Limited Warranty

- SS: 12 Year Warranty / VE & STD: 7 Year Warranty

This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.diodeled.com/limited-warranty/ within the Policies section. For warranty related questions please contact product support.

Consumer's Acknowledgment

Elemental LED, Inc. stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Elemental LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Elemental LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Elemental LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.