

HYDROLUME™ LED STRIP LIGHT

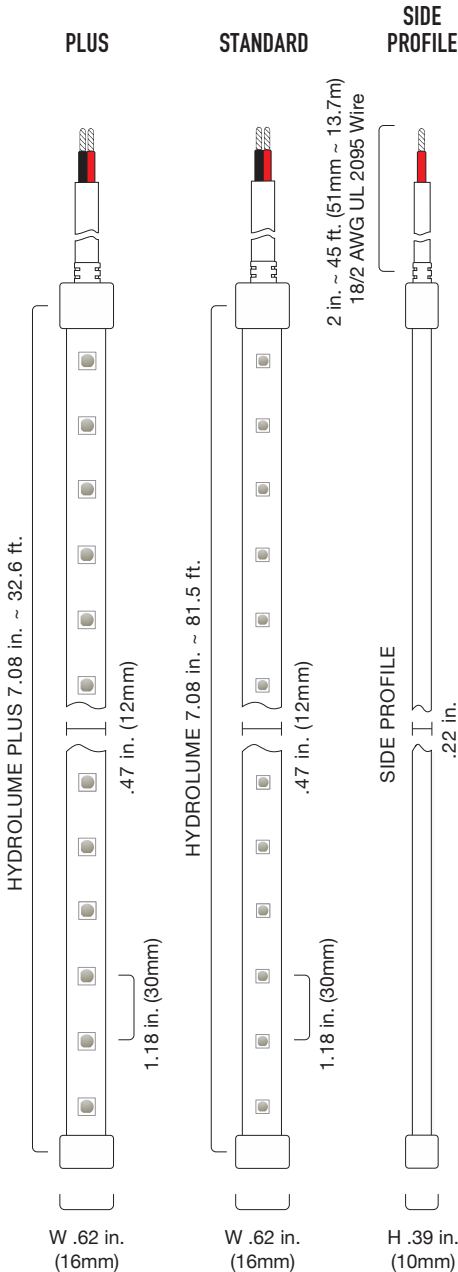
SPECIFICATION SHEET

- Medium brightness
- Waterproof, submersible - IP68
- Saltwater, chlorine, and UV resistant
- UL Listed
- 5-Year limited warranty



STANDARD

PLUS



SPECIFICATIONS

Input Voltage: 24VDC Constant Voltage
Power Consumption: 1.13W/ft., 0.65W/cut point (STD), 2.04W/ft., 1.2W/cut point (PLUS)
LED Chip Type: CREE 3228 SMD Chip (STD), CREE 3535 SMD Chip (PLUS)
LED Chip Beam Angle: 120°
LED Chips / ft.: 10
Material: UV/IR protected TPU
Mounting (sold separately): Stake Bracket, Mounting Bracket, and Mounting Channel
Field Cuttable: No
Maximum Run¹: 81.5 ft. (STD), 32.6 ft. (PLUS)
Connections²: Custom length hard-wire lead ranging from 2 in. ~ 45 ft. (STD) and 1 ~ 45 ft. (PLUS)
Leads: 18/2 AWG UL 2095.

Dimmable: Yes
Ambient Temp³: -4 ~ 122°F (-20 ~ 50°C)
Operating Temp⁴: -4 ~ 176°F (-20 ~ 80°C)
Environment: Outdoor/ wet location
Flammability⁵: Flame retardant
Dimensions: 0.47 x 0.22 in. (W x H) (Strip Only), 0.62 x 0.39 in. (W x H) (w/ Endcap)
Certifications: cULus Listed 2388 Flexible Lighting Products (United States & Canada) # E470197.

Item #	CCT (Kelvin)	Lumens / ft. ⁶	CRI	Efficacy (lm/W) ⁷
DI-24V-HL35-80-** (STD)	3500K	75	76	66.37
DI-24V-HL65-72-** (STD)	6500K	82	71	72.57
DI-24V-HLP35-80-** (PLUS)	3500K	165	78	80.88
DI-24V-HLP65-72-** (PLUS)	6500K	144	74	103.8

HYDROLUME is sold in custom lengths up to 81.5 feet (7.08-in. increments). Use the item number format in the chart above to build custom order. Area marked with (**) should be filled with the total amount of 7.08 in. increments.

Example: 28.32 inches of HYDROLUME in 3500K = **DI-24V-HL35-80-04**

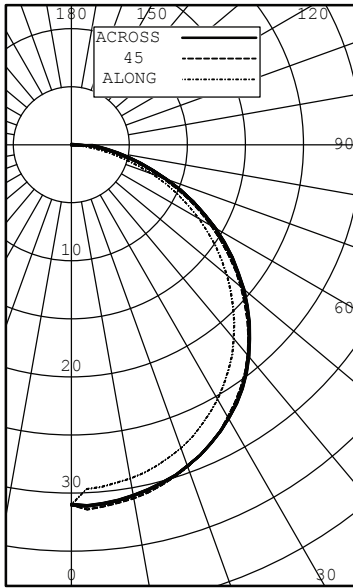
Note: Included end caps add 0.08 in. to the fixture length.

- Note**¹ Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
- Note**² Wire leads and accessories are not rated for in-wall installation unless otherwise noted. Strip light and leads can be submersed in liquids. ENSURE to make electrical connections OUTSIDE of liquids or in a submersible-compliant electrical enclosure.
- Note**³ 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.
- Note**⁴ Operating temperature is measured according to the minimum and maximum ambient temperature environment.
- Note**⁵ This product has been tested and passed glow-wire flammability tests (GWFI index) at 650°C/1200°F, providing an extra level of safety for common areas, hospitality, and areas of high risk fire.
- Note**⁶ Lumen value measured in accordance to IES LM-79-08. LED chips have a luminous flux range with a tolerance of +/- 5%. Each test was performed with a 14.16 in. segment of HYDROLUME (2x 7.08 sections). See 'Photometrics' for more information.
- Note**⁷ Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value has been provided and calculated as follows: Lumen value (measured in accordance to IES LM-79-08) divided by average power consumption per foot.

Item #:	Project:
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HYDROLUME™ 3500K
DI-24V-HL35-80**

POLAR CANDELA DISTRIBUTION GRAPH



INTENSITY (CANDLEPOWER) SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS
0	31	31	31	31	31
5	30	31	31	31	31
10	29	31	31	31	31
15	29	30	30	30	30
20	28	29	30	30	29
25	27	28	28	28	28
30	25	27	27	27	27
35	24	25	25	26	26
40	22	23	24	24	24
45	20	21	21	22	22
50	18	19	19	19	19
55	15	16	17	17	17
60	13	14	14	14	14
65	10	11	11	12	12
70	8	8	8	9	9
75	5	5	6	6	6
80	3	3	4	4	4
85	1	1	2	2	2
90	0	0	0	0	0

ZONAL LUMENS AND PERCENTAGES

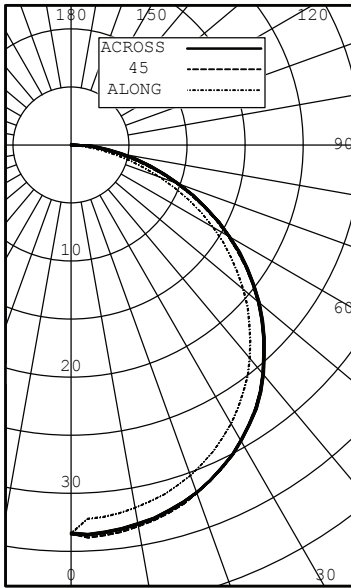
ZONE	LUMENS	% LUMINAIRE
0-30	24	27.11
0-40	40	44.59
0-60	71	78.94
0-90	90	100.00
40-90	50	55.41
60-90	19	21.06
90-180	0	0.00
0-180	90	100.00

Cone Of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	1.95	5.10
6.00	0.868	7.65
8.00	0.488	10.2
10.0	0.313	12.8
12.0	0.217	15.3
14.0	0.159	17.9
16.0	0.122	20.4

HYDROLUME™ 6500K
DI-24V-HL65-72**

POLAR CANDELA DISTRIBUTION GRAPH



INTENSITY (CANDLEPOWER) SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS
0	33	33	33	33	33
5	32	34	34	34	34
10	32	33	33	33	33
15	31	32	33	33	33
20	30	32	32	32	32
25	29	30	31	31	31
30	28	29	29	29	29
35	26	27	28	28	28
40	24	25	26	26	26
45	22	23	23	24	24
50	19	21	21	21	21
55	17	18	18	19	19
60	14	15	16	16	16
65	11	12	13	13	13
70	8	9	10	10	10
75	5	6	7	7	7
80	3	3	4	4	4
85	1	1	2	2	2
90	0	0	0	0	0

ZONAL LUMENS AND PERCENTAGES

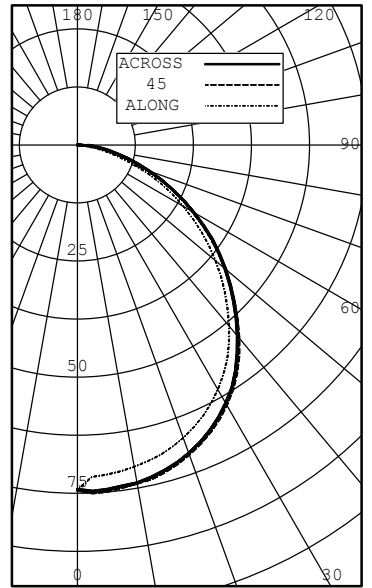
ZONE	LUMENS	% LUMINAIRE
0-30	26	26.77
0-40	44	44.09
0-60	77	78.54
0-90	99	100.00
40-90	55	55.91
60-90	21	21.46
90-180	0	0.00
0-180	99	100.00

Cone Of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	2.11	5.13
6.00	0.936	7.70
8.00	0.527	10.3
10.0	0.337	12.8
12.0	0.234	15.4
14.0	0.172	18.0
16.0	0.132	20.5

HYDROLUME™ PLUS 3500K
DI-24V-HLP35-80**

POLAR CANDELA DISTRIBUTION GRAPH



INTENSITY (CANDLEPOWER) SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS
0	74	74	74	74	74
5	71	74	75	75	75
10	70	74	74	74	74
15	69	72	73	73	73
20	67	70	71	71	71
25	64	67	68	68	68
30	61	64	65	64	64
35	56	59	60	60	59
40	51	54	54	54	54
45	45	47	48	48	48
50	39	41	42	42	42
55	33	34	35	35	35
60	26	28	28	29	29
65	20	21	22	23	23
70	14	15	16	16	17
75	8	9	11	11	11
80	4	5	6	7	7
85	1	2	3	3	4
90	0	0	0	0	0

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	58	29.50
0-40	95	48.08
0-60	163	82.04
0-90	198	100.00
40-90	103	51.92
60-90	36	17.96
90-180	0	0.00
0-180	198	100.00

Cone Of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	4.68	5.05
6.00	2.08	7.58
8.00	1.17	10.1
10.0	0.749	12.6
12.0	0.520	15.2
14.0	0.382	17.7
16.0	0.292	20.2

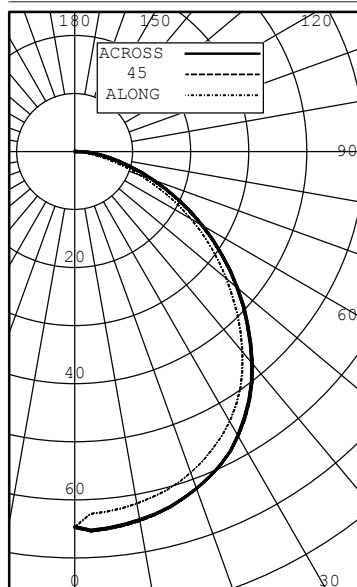
* Photometric data complies with LM-79-08, ANSI C82.77-02

Lumens per foot is calculated based off 14.16 in. LM79 test. A total of 12 chips are on each 14.16 in. section. 10 chips make up a 12 in. section.
 Example: DI-24V-HL35-80-XX LM-79 test is 90 Lumens for 12 chips (14.16 in. section)
 90 lm / 12 chips = 7.5 lm / chip
 7.5 lm x 10 chips (12" section) = 75 lm

HYDROLUME™ PLUS 6500K

DI-24V-HLP65-80**

POLAR CANDELA DISTRIBUTION GRAPH



INTENSITY (CANDLEPOWER) SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS
0	65	65	65	65	65
5	62	65	65	65	65
10	62	64	65	64	64
15	61	63	64	63	63
20	59	61	62	61	62
25	56	59	59	59	60
30	54	56	57	56	56
35	50	52	53	52	52
40	45	47	48	47	48
45	40	42	42	42	42
50	34	36	36	36	37
55	29	30	31	30	31
60	23	24	25	25	25
65	18	19	19	19	20
70	12	13	14	14	15
75	8	8	9	10	10
80	4	4	5	6	6
85	1	2	2	3	3
90	0	0	0	0	0

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	51	29.39
0-40	83	48.04
0-60	142	82.07
0-90	173	100.00
40-90	90	51.96
60-90	31	17.93
90-180	0	0.00
0-180	173	100.00

Cone Of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	4.07	5.09
6.00	1.81	7.63
8.00	1.02	10.2
10.0	0.652	12.7
12.0	0.453	15.3
14.0	0.333	17.8
16.0	0.255	20.3

* Photometric data complies with LM-79-08, ANSI C82.77-02




Lumens per foot is calculated based off 14.16 in. LM79 test. A total of 12 chips are on each 14.16 in. section. 10 chips make up a 12 in. section.

Example: DI-24V-HL35-80-XX LM-79 test is 90 Lumens for 12 chips (14.16 in. section)

90 lm / 12 chips = 7.5 lm / chip

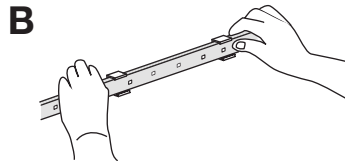
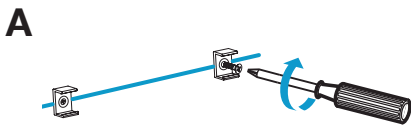
7.5 lm x 10 chips (12" section) = 75 lm

ACCESSORIES

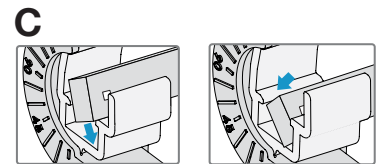
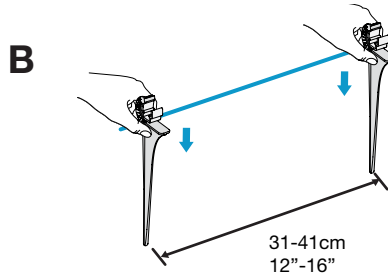
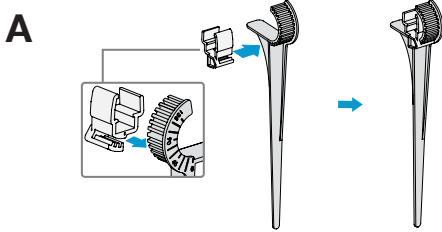
Item #	Type	Description	Image
DI-HL-MTBR (10pk)	HYDROLUME Mounting Bracket	This clips secures HYDROLUME strip to a surface (not compatible with HYDROLUME Mounting Channel). It's recommended to use a single M2.9 (#4) screw for mounting (screws not included). 0.4 x 0.56x 0.35 in. (L x W x H)	
DI-HL-STBR (4pk)	HYDROLUME Stake Bracket	Use for gardens or any outdoor setting, which gives the strip height advantage to be clear of low foliage, dirt and surface obstructions. 1.85 x 0.63 x 7.2 in. (D x W x H)	
DI-HL-MTCH (2pk)	HYDROLUME Mounting Channel	Mounting channels are sold in 39.4 in lengths. These channels can be easily trimmed to custom length and mounted with screws. It's recommended to use M2.9 (#4) screws (not included). 39.4 x 0.62 x 0.4 in. (L x W x H)	

Note: accessories sold separately

HYDROLUME Mounting Bracket

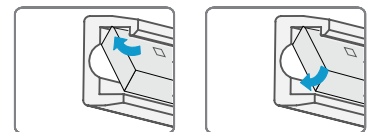
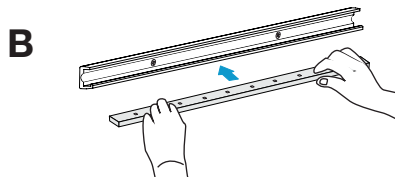
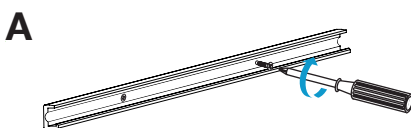


HYDROLUME Stake Bracket



Firmly press HYDROLUME into stake bracket.

HYDROLUME Mounting Channel



Firmly press HYDROLUME into channel lip.

For full installation instructions see the "HYDROLUME Strip Light Installation Guide".

SWITCHES, CONTROLS, LED DRIVERS, & SYSTEM DIAGRAMS

We offer a variety of switches, controls, and LED drivers (power supplies) to address all common light installations. For additional information, please see the additional component sections of our website or catalog. See the 'HYDROLUME Strip Light Installation Guide' for system diagrams and installation instructions. For additional questions and concerns please contact technical support.

ADDITIONAL RESOURCES

Visit the on line product page at www.DiodeLED.com for additional resources including:

- **HYDROLUME LED STRIP LIGHT Installation Guide**
For system diagrams and full installation instructions.
- **Voltage Drop Charts**
Use to specify appropriate wire gauge for installation. Available at the 'Tools & Resources' page at www.DiodeLED.com.

SAFETY & DISCLOSURES

- Install in accordance with the National Electric Code and local regulations.
- This product is intended to be installed and serviced by a qualified, licensed electrician.
- This product requires a compatible LED driver for proper configuration. Do not connect directly to high voltage 120~277V AC power.
- The UL certification of this product requires the fixture to be powered with a compatible Class 2 DC constant voltage LED driver (power supply).
- It is generally recommended to load the driver no more than 80% the labeled rating for maximum performance and longevity. However, see each driver specification sheet for exact minimum and maximum loading values.
- 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.
- Operating temperature is measured according to the minimum and maximum ambient temperature environment.
- Do not power tape light on the plastic spool or when tightly coiled. Excess heat may melt the spool and/or cause damage to the product.
- Ensure adequate airflow and heatsinking is considered when mounting/installing. Exceeding the maximum operating temperature may damage LED chips by reducing the total lamp life, lumen output, and/or adversely impact color consistency.
- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
- 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.
- 'Voltage drop' is a gradual decrease in voltage along a conductor through which current is flowing. When specifying an LED system, ensure to calculate voltage drop appropriately. Voltage drop calculators will suggest the proper gauge wire and distance to install the driver from the fixture. To meet maximum performance, the beginning of the tape light should be receiving no less than 3% of input power rating.
- Strip light must be handled with care. Excessive handling, bending, may damage the product, voiding the warranty.
- Strip light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted.
- Strip light and leads are rated as submersible. ENSURE to make electrical connections OUTSIDE of liquid or in a submersible-compliant electrical enclosure.
- Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
- Lighting technology has some amount of gradual light degradation (output and/or color) over the lifespan of the products. Diode LED products are designed to minimize degradation, but some light degradation and color shift is a normal part of the life span of any LED lighting system.
- 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.

WARRANTY INFORMATION

Limited Warranty

This LED fixture has a five (5) year limited warranty from the date of shipment. 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 under the 'Tools & Resources' tab. For warranty related questions, please contact customer service.

Consumer's Acknowledgment

Diode LED 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 in-field adjustments can have a significant impact on an entire system. Choosing the right components is essential. Diode 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 Diode 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 Diode 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 purchaser 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. Diode LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Diode 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 Diode LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.



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