

# LS365LED

# Underwater



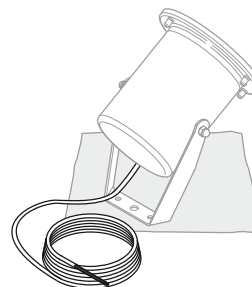
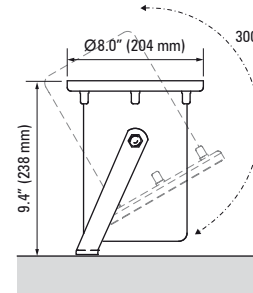
The LS365LED is a high grade, surface mount wet/dry luminaire. The 316 marine grade stainless steel housing is totally sealed and has a rating equivalent to submersion up to 33' (10 m) underwater. Choices of LED color, different beam angles and accessories make this a versatile luminaire suitable for a wide range of wet/dry applications.

## Specifications

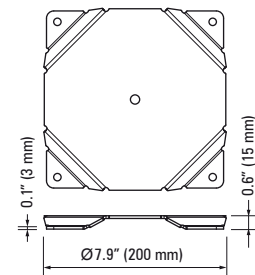
<b>Lamp Source</b>	16 W or 20 W LED <input type="checkbox"/> White (4 300 K typical) <input type="checkbox"/> Warm white (3 000 K typical) <input type="checkbox"/> Blue (470 nm) <i>Other colors by request</i> <input type="checkbox"/> RGB
<b>Approved Use</b>	Wet/dry - fountains only
<b>Control Options</b>	0-10 V PWM
<b>IP Rating</b>	IP68 to 33' (10 m)
<b>Construction</b>	316 marine grade stainless steel
<b>Installation type</b>	Surface mount
<b>Standard inclusions</b>	<b>MicroAntiLeach™</b> wire entry 16.4' (5 m) underwater cord <i>For extra length consult factory</i>
<b>Accessories</b> <i>Order separately</i>	<b>LS6074</b> mounting plate <b>LS645</b> brass grill
<b>Remote Transformers</b> <i>Order separately</i>	Refer to Technical Data section for application specific options
<b>Ambient Operating Temperature</b>	-22 °F to 122 °F (-30 °C to +50 °C)
<b>Photometrics</b>	Refer to <a href="http://www.lumascap.com">www.lumascap.com</a>



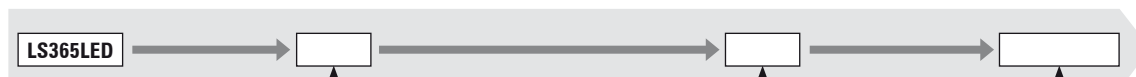
LS365LED



16.4' (5 m) factory fitted flexible underwater cable supplied



LS6074 Mounting Plate



LAMP			
Description	Wattage	Color	Code
LED	16 W	White (4 300 K typ.)	<b>16W4</b>
		Warm white (3 000 K typ.)	<b>16H6</b>
		Blue (470 nm)	<b>16B4</b>
LED	20 W	White (4 300 K typ.)	<b>20W4</b>
		Warm white (3 000 K typ.)	<b>20H6</b>
		Blue (470 nm)	<b>20B4</b>
		RGB	<b>20M4</b>

OPTICAL SYSTEM			
Description	Beam	Code	
Adjustable	Narrow	14°	<b>NR</b>
Adjustable	Narrow Medium	25°	<b>NM</b>
Adjustable	Medium	30°	<b>ME<sup>(1)</sup></b>
Adjustable	Linear Horizontal	40° x 20°	<b>LH<sup>(2)</sup></b>
Adjustable	Linear Vertical	20° x 40°	<b>LV<sup>(2)</sup></b>

<sup>(1)</sup> Recommended for best RGB color mixing.  
<sup>(2)</sup> Refer to beam orientation diagram.

INPUT VOLTAGE	
Description	Code
120 V 50/60 Hz	<b>04</b>
0-10 V Dimmable Driver, 120 V 50/60 Hz	<b>04-DIM<sup>(1)</sup></b>
PWM Dimmable Driver, 12-15 V, 60 Hz	<b>13-DIM<sup>(1)(2)</sup></b>

<sup>(1)</sup> Not available with 16 W module  
<sup>(2)</sup> Requires appropriate transformer.

**Dimmable Wiring Diagram Reference**

Input Voltage	LED Color	Control Type	Wiring Diagram
04-DIM	Single Color	0-10 V	1
13-DIM	Single Color	PWM	7
13-DIM	RGB	PWM	10

## Photometrics

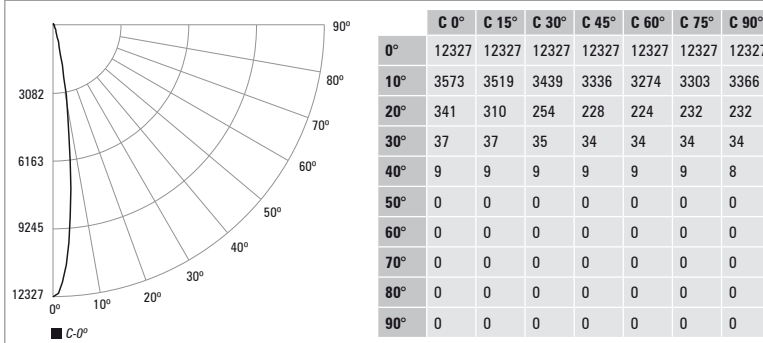
Photometric data is based on test results from a NIST traceable testing lab. IES data is available at [www.lumascap.com](http://www.lumascap.com).  
 Note: No depreciation factor is applied to the data shown.

### LS365LED 4 300 K<sup>(1)</sup> 14° Beam Angle

Power Input	17.8 W
Lumens	1037
Efficacy	58 lm/W

<sup>(1)</sup> To approximate warm white data, multiply by 0.84. Refer web site for IES files for all color temperatures.

#### Polar Candela Distribution



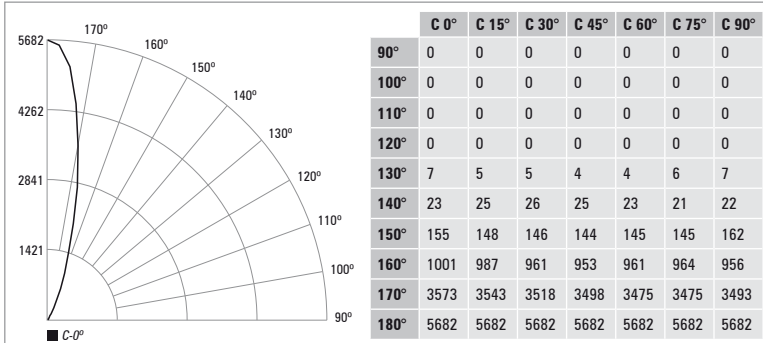
#### Illuminance at a Distance

ft	Center Beam fc	Beam Ø
5	493.1	1 ft
10	123.3	3 ft
15	54.8	4 ft
25	19.7	7 ft
30	13.7	8 ft
40	7.7	11 ft
50	4.9	13 ft

### LS365LED 4 300 K<sup>(1)</sup> 25° Beam Angle

Power Input	21 W
Lumens	1265
Efficacy	60 lm/W

<sup>(1)</sup> To approximate warm white data, multiply by 0.84. Refer web site for IES files for all color temperatures.

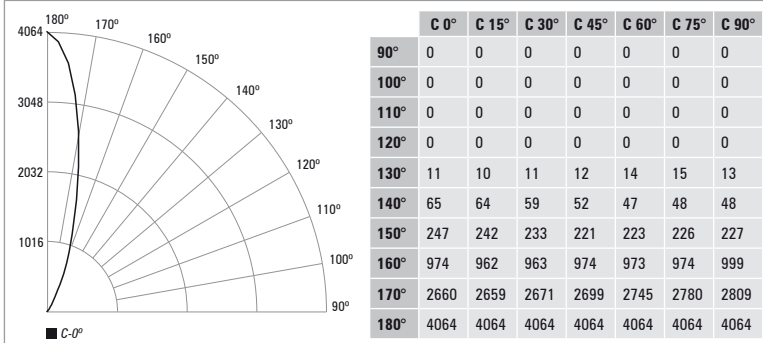


ft	Center Beam fc	Beam Ø
5	227.3	2 ft
10	56.8	4 ft
15	25.3	7 ft
25	9.1	11 ft
30	6.3	13 ft
40	3.6	18 ft
50	2.3	22 ft

### LS365LED 4 300 K<sup>(1)</sup> 30° Beam Angle

Power Input	21.6
Lumens	1195
Efficacy	55 lm/W

<sup>(1)</sup> To approximate warm white data, multiply by 0.84. Refer web site for IES files for all color temperatures.

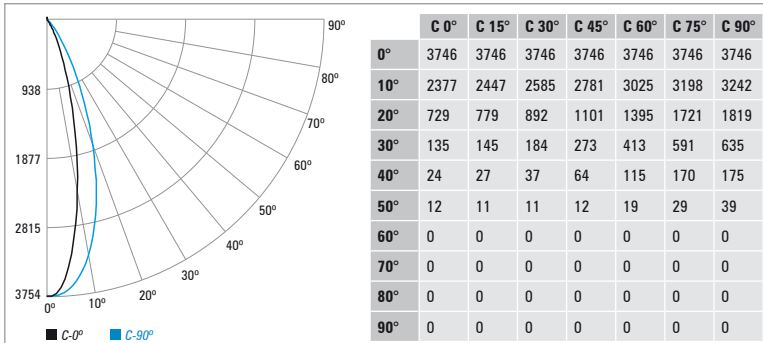


ft	Center Beam fc	Beam Ø
5	162.6	3 ft
10	40.6	5 ft
15	18.1	8 ft
25	6.5	13 ft
30	4.5	16 ft
40	2.5	21 ft
50	1.6	27 ft

### LS365LED 4 300 K<sup>(1)</sup> 20° x 40° Beam Angle

Power Input	21.5
Lumens	1182
Efficacy	55 lm/W

<sup>(1)</sup> To approximate warm white data, multiply by 0.84. Refer web site for IES files for all color temperatures.



ft	Center Beam fc	Beam W	Beam L
5	149.8	2 ft	4 ft
10	37.5	4 ft	7 ft
15	16.6	7 ft	11 ft
25	6	11 ft	18 ft
30	4.2	13 ft	21 ft
40	2.3	18 ft	28 ft
50	1.5	22 ft	35 ft

#### Beam Orientations

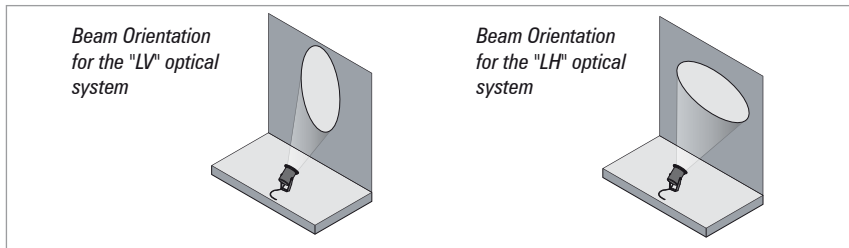


Diagram 1 - 0-10 V Dimming for Line Voltage LED Luminaires

Please note: The use of a GFCI may be required. Consult local wiring rules.

0-10V

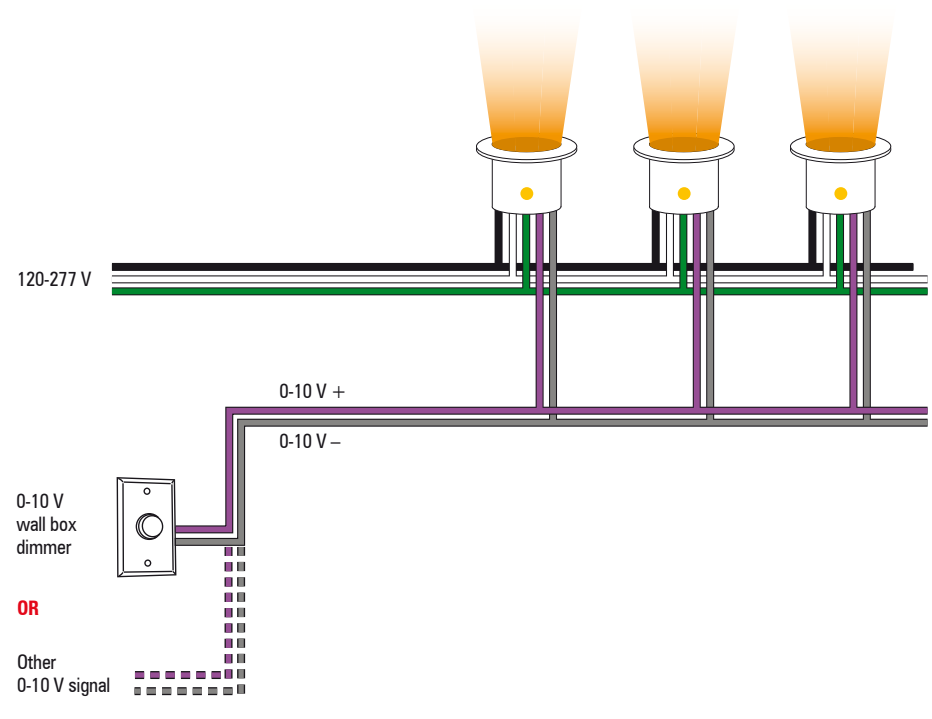
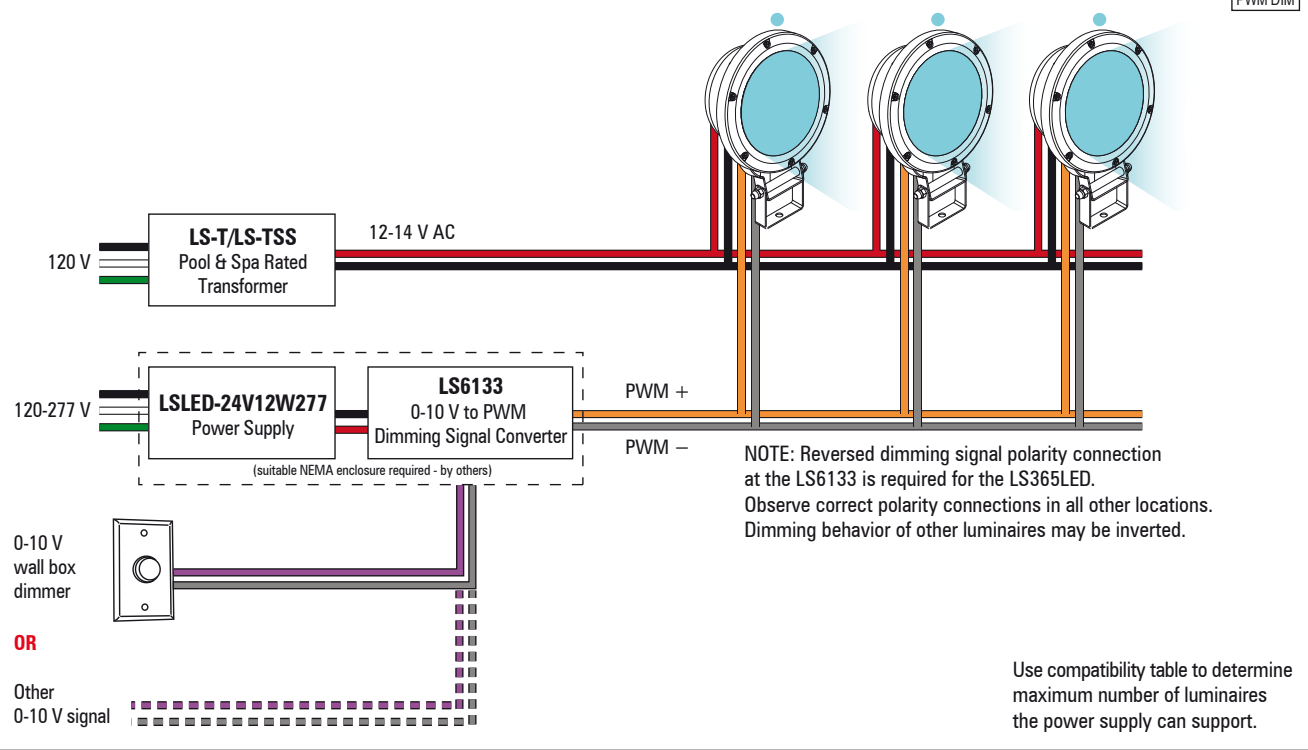


Diagram 7 - 0-10 V Dimming - Low Voltage Submersible LED Luminaire on 12-14 V AC Circuit

Please note: the use of a GFCI may be required. Consult local wiring rules.

PWM DIM

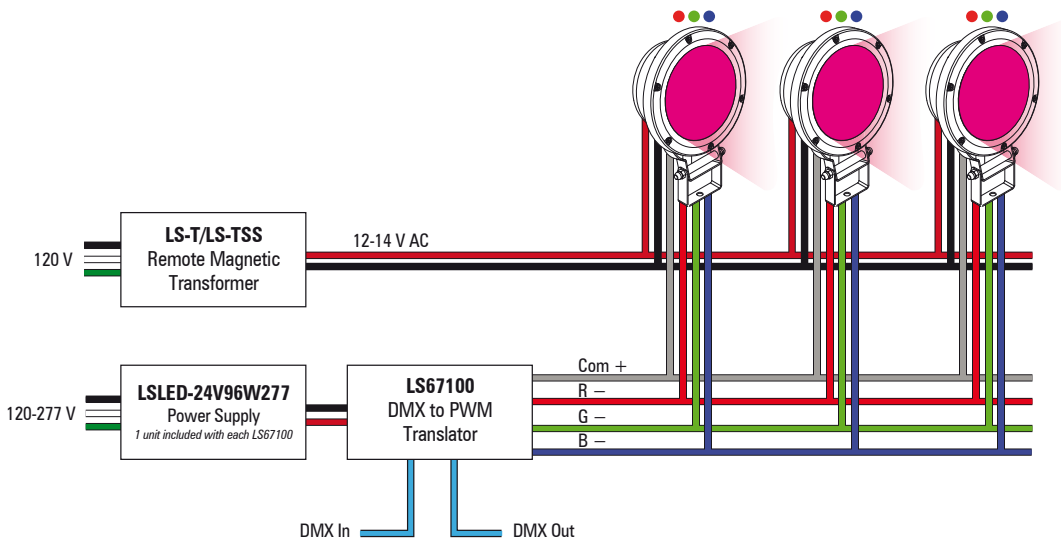


NOTE: The above diagrams are intended to show electrical pathways between luminaires and ancillary devices. These diagrams are not intended to show type or color of cord/wire, wire gauge or approved use of the cord/wire supplied with luminaires.

Consult the luminaire-specific cutsheet or the factory for detailed specifications.

Diagram 10 - RGB via DMX for Low Voltage Submersible LED Luminaire on 12-14 V AC Circuit

Please note: the use of a GFCI may be required. Consult local wiring rules.



Use compatibility table to determine maximum number of luminaires the power supply can support.

NOTE: The above diagrams are intended to show electrical pathways between luminaires and ancillary devices. These diagrams are not intended to show type or color of cord/wire, wire gauge or approved use of the cord/wire supplied with luminaires.

**Consult the luminaire-specific cutsheet or the factory for detailed specifications.**

## Transformers for Submersible & Swimming Pool-rated LED Luminaires

The following list of transformers are for use with submersible and/or pool rated luminaires specifically described as being compatible with either 12 V AC (wirewound only) transformers. Compatibility will be noted in the ordering code of the luminaire concerned, and will typically be referenced by Voltage Code '13' or '13-DIM'. In the case of '13-DIM' additional components may be required. Refer to the applicable wiring diagram/s.

Compatibility with each transformer or power supply is indicated by the value mentioned, representing the maximum number of luminaires that may be powered from each transformer or power supply. Please note, this does not take into consideration voltage drop or ampacity limits of the branch circuit. For assistance, please contact factory.

	Pool, Spa & Fountain Transformers					
	LS-T-100	LS-TSS-100	LS-T-300	LS-TSS-300	LS-T-500	LS-TSS-500
<b>Input Voltage</b>	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz
<b>Output Voltage</b>	12/13/14 V 60 Hz	12/13/14 V 60 Hz	12/13/14 V 60 Hz	12/13/14 V 60 Hz	12/13/14 V 60 Hz	12/13/14 V 60 Hz
<b>Wattage</b>	100 W	100 W	300 W	300 W	500 W	500 W
<b>LS365LED</b>	2	2	7	7	12	12

## Pool, Spa and Fountain Transformers

**LS-T-100 / LS-TSS-100**

Magnetic transformer - wall mounted

<b>Input</b>	120 V
<b>Rating</b>	100 W
<b>Output</b>	12/13/14 V
<b>Output Circuits</b>	1
<b>Protection</b>	Electrostatic shield, short circuit and over-voltage breaker
<b>Approvals</b>	UL, CUL
<b>NEMA Rating</b>	3R
<b>Construction</b>	Powder coated steel / stainless steel (LS-TSS-100)
<b>Dimensions</b>	<b>H</b> 9.06" (230 mm) <b>W</b> 5.06" (129 mm) <b>D</b> 4.59" (117 mm)
<b>Weight</b>	12.5 lb (5.7 kg)

**LS-T-500 / LS-TSS-500**

Magnetic transformer - wall mounted

<b>Input</b>	120 V
<b>Rating</b>	500 W
<b>Output</b>	12/13/14 V
<b>Output Circuits</b>	1
<b>Protection</b>	Electrostatic shield, short circuit and over-voltage breaker
<b>Approvals</b>	UL, CUL
<b>NEMA Rating</b>	3R
<b>Construction</b>	Powder coated steel / stainless steel (LS-TSS-500)
<b>Dimensions</b>	<b>H</b> 9.06" (230 mm) <b>W</b> 5.06" (129 mm) <b>D</b> 4.59" (117 mm)
<b>Weight</b>	14 lb (6.4 kg)

**LS-T-300 / LS-TSS-300**

Magnetic transformer - wall mounted

<b>Input</b>	120 V
<b>Rating</b>	300 W
<b>Output</b>	12/13/14 V
<b>Output Circuits</b>	1
<b>Protection</b>	Electrostatic shield, short circuit and over-voltage breaker
<b>Approvals</b>	UL, CUL
<b>NEMA Rating</b>	3R
<b>Construction</b>	Powder coated steel / stainless steel (LS-TSS-300)
<b>Dimensions</b>	<b>H</b> 9.06" (230 mm) <b>W</b> 5.06" (129 mm) <b>D</b> 4.59" (117 mm)
<b>Weight</b>	13 lb (5.9 kg)

## Control Related Equipment

**LS6133**

0-10 V to PWM translator - NEMA enclosure required (by others)

<b>Input</b>	24 V DC
<b>Rating</b>	96 W max
<b>Output</b>	4 A max
<b>Output Circuits</b>	1
<b>Approvals</b>	UL, CUL Recognized, Class 2
<b>IP Rating</b>	IP66
<b>Dimensions</b>	<b>H</b> 5.2" (132 mm) <b>W</b> 1.3" (33 mm) <b>D</b> 1" (25 mm)
<b>Weight</b>	0.2 lb (0.1 kg)

**LS67100**

DMX to PWM translator - dry location only

<b>Input</b>	24 V DC
<b>Rating</b>	4 x 60 W max
<b>Output</b>	4 x 2.5 A max
<b>Output Circuits</b>	4
<b>Approvals</b>	UL, CUL
<b>IP Rating</b>	N/A
<b>Dimensions</b>	<b>H</b> 11.25" (286 mm) <b>W</b> 4.6" (117 mm) <b>D</b> 3.2" (82 mm)
<b>Weight</b>	0.5 lb (0.2 kg)

