

CSI 3-PART SPECIFICATIONS  
WATERGLOW LIGHTING SYSTEM  
40W RGBW LED LIGHTS  
SECTION 26 55 29 - UNDERWATER LIGHTING

Project Name:  
Model Specified:  
Number of fixtures:  
Lighting Controller:  
Cord Length:  
Gauge:  
Total watts:  
Total lumens:

1.0 DESCRIPTION

- A. Light Set shall consist of line voltage (120 VAC) 40W RGBW LED lighting system with lights.
- B. Lights shall consist of a Class II power supply integrated with a 40W RGBW LED engine consisting of an eight place Led Board, Driver, and Optic Lenses.
- C. Light Fixture shall be of 300 Series Cast Stainless Steel construction with integral threaded hubs to allow electrical cable entry and mounted with series 300 stainless steel brackets and fasteners.
- D. Light Fixture Assembly shall consist of a lens made of polycarbonate with a clear non-diffusing surface with a thickness of 3 mm and sealed with "U" shaped lens gasket made of silicone rubber. Sealing ring shall be machined 300 series stainless steel. Fasteners and mounting hardware shall be of 300 series stainless steel.
- E. Underwater Pin and Socket Connector shall consist of a 900 series, IP68 pin and socket connector. It shall be of a 7-pin configuration rated 32 Amps at 600 VAC. The pin and socket ends shall each be attached to a UL Listed underwater power cable rated at 600 Volts. They both shall be permanently secured to their UL Listed power cables by an integrated neoprene grommet and compression nut assembly. These assemblies shall be epoxy filled to prevent entry of water or any other foreign matter. The pin end assembly shall be permanently attached to the light fixture with a nonmetallic connector and potted using a flexible approved potting compound. The socket end assembly shall be permanently attached to the power cable. Both the pin end and socket end assemblies come with protector caps.
- F. Underwater Power Cable shall be UL Listed and specifically designed for underwater use. The conductors are flexible, stranded copper wire sized for the amp draw and length of run. The conductors shall be resistant to oil, water, and cracking. Power cable shall be fitted with a cable strain relief device, located within five feet of the first light fixture. This will ensure that no potential damage can occur to any cable connections, due to tension on the cable.
- G. Light Controls shall consist of a GFCI (Ground Fault Circuit Interrupter), overcurrent protection, timer, and RGBW controller with power supply. The RGBW controller is pre-programmed with assorted color, shows and holiday themed selectable programs. The controller can also adjust program speed and brightness. The controller options shall consist of a programmable controller with

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- H. Safety Testing shall be tested and approved as a complete assembly. This shall be Certified by Underwriters Laboratories Inc. requirements for compliance with Submersible Luminaries Standards per UL 676 and CSA C22.2 NO.89.
- I. Warranty on all KASCO MARINE® LIGHTING SYSTEMS are covered under warranty at 100% replacement cost should it fail due to defects in materials or workmanship for a period of 3 years.
- J. Acceptable Manufacturer for the RGBW LED Lighting System shall be KASCO MARINE®, 800 Deere Road, Prescott, WI 54021, 715-262-4488, www.kascomarine.com
- K. Installation shall be done in accordance with the installation instructions and in compliance with all local and National Electrical Code requirements. Any alterations to or substitution for items in this system, unless allowed by the installation instructions, will void the Underwriters Laboratories Listing and will void the product Warranty. Read the instructions thoroughly before starting the installation and follow them carefully throughout.

2.0 DETAILED INFORMATION

- A. This specification is intended to provide prospective bidders the necessary information pertaining to the RGBW LED Lights specified for the project:
- B. Lighting System shall be      watts,      lumens, RGBW LED Lights with      total fixtures.
- C. Lighting Controller shall be:
- D. Cable Length shall be      feet total of      gauge, seven conductor underwater power cable.
- E. Model Number Specified is

TABLE 1: CABLE SIZING CHART FOR RGBW LED LIGHTS

Maximum recommended length (in feet) from light set to control panel. Kasco Marine® recommends consulting a Licensed Electrician to properly size any underground cable from the main power source to our control panel. Cable runs to the panel located away from main power source requires recalculating voltage drop to insure proper cable sizing. Please contact Kasco Marine® if assistance is required.

7 Conductor Cord				Minimum Copper Wire Gauge Size	
Watts Per Fixture	# of Fixtures	Volts	Amps	#16	#14
40	2	120	0.667	500 ft.	
	3		1.000	500 ft.	
	4		1.333	300 ft.	500 ft.