# Architectural, IP67 Rated (Light Emitting Diode) RGBL Wash Panel

## General

### The product shall be an Iluminarc Ilumipanel ML or Ilumipanel LL as manufactured by Chauvet & Sons, LLC or approved equal.

#### The product shall be a color-mixing high-intensity LED illuminator using Quad-color RGBL LEDs using 20W LEDs and have DMX control of intensity and color.

#### The products shall conform to CSA C22.2 No. 166 and UL 1573 stage and studio use as well as UL 8750 LED standards, tested via MET to conform to the aforementioned UL specifications, product shall hold MET and CE markings.

#### The product shall comply with the USITT DMX-512 standard.

#### The product shall comply with the current PLASA ANSI E1.20-2010 remote device management (RDM) standard.

#### All LED products shall be provided by a single manufacturer to ensure color consistency.

### Each LED optic shall be spaced for optimal photometric performance.

#### PHYSICAL

### The product shall be constructed of Cast Aluminum housing with Impact Resistant Glass, free of defects or imperfections.

### The dimensions of the Iluminarc Ilumipanel ML fixture shall be 20.9 x 7.9 x 10.1in (530 x 200 x 256mm) and weigh approximately 29.98lb (13.6kg). The dimensions of the Iluminarc Ilumipanel LL fixture shall be 32.4 x 9.92 x 15in (824 x 252 x 381mm) and weigh approximately 81.57lb (37kg).

### The following shall be provided:

#### 6.25ft Data hardwired waterproof cable, bare wired to hardwired

#### 6.25ft Power hardwired waterproof cable, bare wired to hardwired

#### Filter Frame

### The housing shall have a CM5 Marine Grade, Off White paint finish.

### Power supply, cooling and electronics shall be integral to each product.

### Product housing shall provide an easy access for lens filter installation while maintaining IP67 Ratings.

## Environmental and Agency Compliance

### The product shall conform to UL 1573, CSA C22.2 No. 166, and UL 8750 LED standards, tested via MET to conform to the aforementioned UL specifications, product shall hold MET and CE markings.

### The product shall be rated for IP-67 outdoor/wet installations with pressure equalizing M12 GORE Valve.

## Thermal

### Product heat management shall be achieved through convection cooling.

### The product shall utilize advanced thermal management systems to maintain LED life to an average of 70% intensity after 50,000 hours of use.

### The product shall operate in an ambient temperature range of -40°F (-40°C)minimum**,** to 113° F (45°C) maximum, ambient temperature.

## Electrical

### The product shall be equipped with an auto ranging 100V to 277V 50/60 Hz internal power supply.

### The product shall support power in via bare wire waterproof input cable.

### The product requires power from a non-dim source.

### Products shall have thermal output compensation to prevent thermal shift of color or intensity.

### Product power input shall have current-limiting fuse protection.

### Power supply shall have power factor correction.

### OPTICAL DATA

### The product shall contain a Quad-Color LED color system to provide color characteristics as described in the Color section below.

### The Ilumipanel ML shall have a native beam angle of 6.5° and the Ilumipanel LL shall have a native beam angle of 6.4°.

### All LEDs used in the product shall be high brightness and proven quality from established and reputable LED manufacturers.

### The Ilumipanel ML shall have a native lumen output of 7,045 and the Ilumipanel LL shall have a native lumen output of 18,228.

### Manufacturer of LED emitters shall utilize an advanced production LED binning process to maintain color consistency.

### LED emitters should be rated for nominal 50,000-hour LED life to 70% intensity.

### All LED products (100% of each lot) shall undergo a minimum three-hour burn-in test during manufacturing.

### LED system shall comply with all relevant patents.

## Color

### The Ilumipanel ML shall utilize a minimum of 12 Quad-Color 20W LED emitters and the Ilumipanel LL shall utilize a minimum of 36 Quad-Color 20W LED emitters.

#### These emitters shall be composed of Red, Green, Blue, and Lime LEDs.

1. The typical colors of LED (Red, Green, Blue, and Lime) shall match across all Iluminarc IP Products.
2. The color temperature shall be 1800°K to 10000°K.

## Dimming

### The LED system shall use 16-bit nonlinear scaling techniques for high-resolution dimming.

### The product shall have a selectable dimming curve to simulate incandescent dimming curves.

### Dimming curve shall be optimized for smooth dimming over longer timed fades.

## REQUIRED FEATURE SET

### The product shall offer user changeable filters to alter beam angles while maintaining IP67 rating.

### The product shall offer 4 optional beam shaping filters: Medium, Wide, Very Wide, and Asymmetrical.

### The product shall offer mounting via Integrated Yoke Bracket with 13M hole.

### The product shall offer fixture setup via RDM device.

### The Ilumipanel ML shall offer a maximum BTU of 638 BTUs/hr. The Ilumipanel LL shall offer a maximum BTU of 1,603 BTUs/hr.

### The product shall include CM5 Marine Grade Paint.

### The product shall offer 24 DMX selectable Color Presets.

### The product shall offer a linear Color Temperature selectable via DMX from 1800K-10000K.

### The product shall offer up to 3 RGBL Groups with separate control capabilities.

### The product shall offer an Impact Resistance Rating of IK10 and Vibration Rating of 3G.

### The Ilumipanel ML shall offer a Wind Load Rating-EPA of 1.044ft² and the Ilumipanel LL shall offer a Wind Load Rating-EPA of 1.819ft².

### Products without the required feature set described above shall not be acceptable.

## Control and User interface

### The product shall be USITT DMX 512A-compatible via in and thru a single 5 pin Data cable with 2 lines for Data In, 2 lines from Data Out, and a shared common line.

### The product shall offer control via DMX and RDM.

### The product shall be compatible with the ANSI RDM E1.20 standard.

#### All product functions shall be accessible via RDM protocol for modification from suitably equipped control console or RDM controller.

#### Temperature sensor within the luminaire shall be viewable in real time via RDM and on the control panel of the product.

#### Products not offering RDM compatibility, feature set access or temperature monitoring via RDM shall not be allowed.

### The product shall be capable of individually controlling 3 equally spaced sections.

### The product shall offer RGB and RGBL, direct and single channel control via menu settings selectable thru RDM device.

### A variable-rate strobe channel shall be provided.

### The product shall offer stand-alone functionality after initial configuration via RDM Controller.

#### Product shall ship with 24 preset colors accessible as a stand-alone feature.

#### Product shall ship with 14 preset color temperatures accessible as a stand-alone feature.

#### Products without stand-alone operation features described above shall not be acceptable.

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