# Architectural, IP66 Rated (Light Emitting Diode) Linear-style product

## General

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

#### The product shall be a color-mixing high-intensity LED illuminator utilizing 9 Quad-color RGBL LEDs per segment, using 3.5W 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 products shall hold RoHS and FCC listings.

#### 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.

#### The products shall have end-to-end placement while maintaining optical spacing to prevent scalloping between products.

#### PHYSICAL

### The product shall be constructed an Extruded Aluminum housing, free of defects or imperfections.

### The dimensions of the Iluminarc Ilumiline SL fixture shall be 12 x 3.03 x 3.43in (305 x 77 x 87mm) and weigh approximately 2.65lbs (1.2kg). The dimensions of the Iluminarc Ilumiline ML shall be 36 x 3.03x 3.43in (915 x 77 x 87mm) and weigh approximately 9.8lbs (4.5kg).

### The following shall be provided:

#### 3.7ft Hardwire to Proprietary Waterproof Cable

### The housing shall have a Brushed Aluminum Anodized finish.

### Product housing shall provide easy access for lens filter installation while maintaining IP66 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-66 for Dry/Damp/ Wet Location, Indoor and Limited Outdoor Permanent Installations.

## 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. The startup temperature range shall be -4°F (-20°C) minimum, to 113°F (45°C) maximum.

## Electrical

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

### The product shall support power in and thru operation.

#### Power in shall be via a Proprietary Waterproof input connector.

#### Power thru shall be via Proprietary Waterproof output connector.

#### Product power wiring and accessory power cables shall be rated to support linking of up to 52 units at 120V and 92 units at 277V for the Ilumiline SL, and up to 18 products at 120V and 32 units at 277V for the Ilumiline ML.

### 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 Ilumiline SL shall have a native beam angle of 14.5° and the Ilumiline ML shall have a native beam angle of 13.3°.

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

### The Ilumiline SL shall have a native lumen output of 808 and the Ilumiline ML shall have a native lumen output of 2,432

### 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 product shall utilize a minimum of 9 LED emitters per segment.

#### These emitters shall be composed of 9 (Ilumiline SL) or 27 (Ilumiline ML) Red, Green, Blue, and Lime LEDs.

1. The typical colors of the 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 IP66 rating.

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

### The product shall offer mounting via 2 brackets.

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

### The product shall offer consistent pixel pitch for end-to-end placement with additional fixtures.

### The 12” product shall offer a maximum BTU of 78 BTUs/hr. The 36” product shall offer a maximum BTU of 225 BTUs/hr.

### The product shall offer integrated power and data onto a single IP66 14AWG cable.

### The product shall receive power and data via external IP66 rated Power and Data Interface.

### 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 an Impact Resistance Rating of IK10 and a Vibration Rating of 3G.

### The Ilumiline SL shall have a Wind Load Rating-EPA of .237ft² and the Ilumiline ML shall have a a Wind Load Rating-EPA of .592ft².

### 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 an 8 conductor, IP66 rated power and data cable.

### The product shall offer control via USITT DMX-512a 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 36” product shall be capable of individually controlling 3 equally spaced sections, exactly equal to the size of the 12” product option.

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

### 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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