# 10.1 in, Warm White, Convection Cooled House Light

## General

### The product shall be an Ovation H-55WW as manufactured by Chauvet & Sons, LLC or approved equal.

#### High-power warm white, convection cooled house light with 16-bit dimming, interchangeable lens plates, adjustable PWM (pulse width modulation)

#### 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, free of defects or imperfections.

### The dimensions of the fixture shall be 13.14 x 6.92 x 4.52in (334 x 176 x 115mm) and weigh approximately 7.4lb (3.4kg)

### The following shall be provided:

#### Lens kit featuring 65°, 40°, and 25° lenses and 80° filter

#### Egg Crate Filter

#### Recess and Sconce mounting kit

### The housing shall have a Black or White finish.

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

## 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 conform to Part 15 of the FCC rules.

### The product shall be rated for IP20 for dry location use.

## Thermal

### Product heat management shall be achieved though 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 -4°F (-20°C) minimum**,** to 113° F (45°C) maximum, ambient temperature.

## Electrical

### The product shall be equipped with an auto ranging 100V to 240V 50/60 Hz internal power supply.

### The product shall be powered via Hard-wired input

### 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 Warm White LED color system to provide color characteristics as described in the Color section below.

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

### 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 1 129.5 W LED emitter.

###### The color rendering index (CRI) shall be: 91.7 at 3083 K

1. The product shall be able to provide TM 20-18 scores with a Color Fidelity value of Rf 92.1 with a gamut of Rg 99.1 at 3083 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.

### The LED system shall be digitally driven using high-speed pulse width modulation (PWM).

### PWM control of LED levels shall be imperceptible to video cameras and related equipment.

### PWM shall be capable of being set on the control via on board controls or via RDM from 600 Hz 1,200 Hz, 2,000 Hz, 4,000 Hz, 6,000 Hz, or 25,000 Hz.

## REQUIRED FEATURE SET

### The product shall offer Yoke, Pendant, Sconce, and Recess Mounting

### The product shall offer Strobe Rate of 0 to 30 Hz

### The product shall offer built-in wireless DMX

### The product shall offer no less than 4 different dimmer curves and speeds

### 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 5-Pin XLR DMX and Phoenix Connector.

### The product shall offer control via DMX, W-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 must be able to be setup and configured remotely via RDM.

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

### The product shall offer stand-alone functionality eliminating the need for a console.

#### Product shall ship with 4 auto sequences with speed control accessible as a stand-alone feature.

#### Product can be linked together with standard DMX cables and controlled from designated master product.

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

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