

## **Descriptive specification for the MAC 250 Wash**

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### **General**

The luminaire shall be an automated yoke-mounted profile spotlight that employs a 250 watt discharge lamp as the light source.

The luminaire shall provide a 19.1° one-tenth peak beam angle and be supplied with an additional lens that provides a 52.5° one-tenth peak beam angle.

### **Mechanical effects**

The luminaire shall provide cyan, yellow, and magenta (CMY) subtractive color mixing.

The luminaire shall provide a motorized wheel with 6 replaceable dichroic color filters, including one 5500 – 2900 K color temperature correction and one ultra-violet effect filter, plus an open position.

The luminaire shall provide a motorized frost filter.

The luminaire shall provide full-range dimming with options of tungsten or linear dimming curves and variable speed flash effects by means of opposing mechanical shutters.

The yoke shall pan 540° and the head shall tilt 257°.

### **Control**

The luminaire shall respond to command signals conforming to the USITT DMX512 (1990) standard and shall have locking 3-pole and 5-pole XLR connectors for input and throughput of serial data. User-selected software settings shall be adjustable via an onboard control panel with LED display or via data cabling in conjunction with a remote control unit. At user option, the dimmer, each of the CMY filters, the color wheel and the frost filter shall be controllable with one or two control channels, offering coarse and fine control options. Pan and tilt shall also have coarse and fine control options on separate control channels.

### **Performance**

When fitted with a new MSD 250/2 discharge lamp, with the frost filter inactive, and projecting a beam with a:

- 19.1° one-tenth peak angle, the luminaire shall emit a total luminous flux of 7700 lumens
- 52.5° one-tenth peak angle, the luminaire shall emit a total luminous flux of 9100 lumens.

When fitted with a new MSD 250/2 discharge lamp, with the frost filter active, and projecting a beam with a:

- 34.8° one-tenth peak angle, the luminaire shall emit a total luminous flux of 4800 lumens.
- 65.6° one-tenth peak angle, the luminaire shall emit a total luminous flux of 5100 lumens.

## **Housing**

The luminaire shall be constructed of sheet steel and aluminum alloy with an electrostatically applied powder coating on exterior surfaces. The covers for the head and yoke shall be constructed of a UV-resistant fiber-reinforced composite material with integral color. The color shall be black. The housing shall provide an IP protection factor of 20 (two-zero).

## **Installation**

The luminaire shall operate in any orientation. It shall be supplied with two brackets to which mounting clamps may be bolted. These brackets shall attach to the base with quarter-turn fasteners such that the luminaire may be installed at any increment of 45° in a plane parallel to the structure. There shall be a reinforced attachment point in the luminaire's base for a secondary attachment for safety purposes.

## **Electrical**

The luminaire shall provide a switchable power supply and shall operate on 50 - 60 hertz supplies at 100 - 250 volts. It shall be fitted with a 3 meter (9.8 ft.) length of three conductor 1.0 mm<sup>2</sup> (13 AWG) electrical cable for connection to AC power. The luminaire shall be electrically grounded.

## **Approvals**

The luminaire shall be designed to meet CE safety standard EN 60598-2-17, CE electromagnetic compatibility standards EN 55 103-1, EN 55 015 as well as EN 61 547, CSA standard C22.2 No. 166, and ANSI/UL standard 1573.

## **Physical**

With tilt neutral, the luminaire's dimensions shall be approximately 375 x 315 x 540 mm (14.8 x 12.4 x 21.2.0 in.).

The luminaire shall weigh approximately 23 kg (50.5 lbs).