

## CHALICE 150 SINGLE POINT LED DOWN LIGHT

### 1.01 Chalice 150

#### 1. General

1. The luminaire shall be a full spectrum fixed white LED down light employing a single 10,000 lumen emitter that is convection cooled. The Luminaire shall be the Chalice 150 down light by Altman Stage Lighting, Inc or approved equal.
2. The Luminaire shall incorporate a state of the art microprocessor-controlled solid state LED light engine, and on-board power supply.
3. The luminaire shall have the ability to house several different fixed white LED choices of 2700K, 3000K, 4000K, & 5000K. each with an output of greater than 90 CRI.
4. The luminaire shall incorporate silent, convection cooling without employing the use of fans or filters. Any luminaire not employing convection cooling shall not be accepted.
5. The luminaire shall utilize a high efficiency reflector system to determine beam angle with Seven (7) different choices.
6. IES Photometric files shall be available upon request from the manufacturer to model light output using the industry standard design software.
7. The luminaire shall comply with USITT DMX-512 A Standard
8. The luminaire shall be constructed of a spun aluminum housing with steel fittings and attachment components, all free of pits and burs.
9. Standard finish shall be Epoxy Sandex White, electrostatic application. The luminaire shall be available with optional Black and Silver colors with additional custom color finishes available upon request.
10. Each Luminaire's Power supply, cooling and electronics shall be integral to each unit.
11. The housing shall serve as a directional chimney to guide heat away from the LED array, integral driver and integral power supply.
12. The LED substrate is coupled to a highly efficient heat sink and cooling system for prolonged life of the LEDs.
13. The Luminaire shall be capable of, dependent upon model, Pendant Mounting, Air craft cable mounting, Yoke Mounting, or Wall Mounting.

#### 2. Electrical

1. Supply Voltage shall be 120 to 277, 50/60Hz. (+/- 10% auto-ranging)
2. The luminaires current draw shall not exceed 1.2 amps (120V) or 0.68 amps (220V) or 0.58 amps (277 volts) luminaires that do not meet these criteria shall not be accepted.
3. The light engine source shall be one (1) 2700K, 3000K, 4000K, or 5000K 150 Watt LED chip.
4. The luminaire shall be ETL and cETL Listed.

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### 3. Control

1. The luminaire shall be equipped with an LED system compatible with standard 8-bit input, with high resolution dimming.
2. The luminaire shall interact seamlessly with conventional sources.
3. The luminaire shall be digitally driven using high-speed Pulse Width Modulation (PWM)
4. The luminaire shall have an available "smoothing" mode which makes PWM control of LED levels imperceptible to video cameras and related broadcast equipment.
5. The luminaire shall have a local control keypad with an LED display for configuration and control of:
  1. DMX-512A device address
  2. Luminaire personality
  3. Stand Alone operation
6. It shall be possible to lock out the control keypad on the luminaire to prevent accidental change in luminaire configuration. Locking and unlocking the luminaire shall be via a predefined key sequence.
7. The Luminaire shall provide full range (0%-100%) dimming without exhibiting flicker or stepping. Dimming curves shall be optimized for smooth dimming at low intensities and over longer timed fades.
8. Luminaire shall have an available "Master" function to provide control of intensity of additional luminaires on the DMX string, when applicable.

The luminaire shall be capable of standalone operation, activated and configured at the keypad.

### 4. Physical

1. The Chalice 150 Down Light Light Led Shall not exceed 16" H x 10" in Diameter.
2. The addition of optional add on reflectors shall not protrude past the outer housing of the luminaire. Optional reflectors shall include the options for 20, 29, 39, 46, 51, 64, & 91 degrees.
3. The construction of the unit shall be a machined aluminum, sheet metal and molded engineering grade plastic.
4. The Luminaire shall be capable of, dependent upon model, Pendant Mounting, Air craft cable mounting, Yoke Mounting, or Wall Mounting.

### 5. Environmental

1. Maximum operating ambient temperature shall not exceed 104 degrees Fahrenheit (40 degrees Celsius).
2. A Convective cooling system shall be employed to maintain the optimal operating temperature of the luminaire.
3. The Luminaire shall be rated as a non IC rated enclosure and shall be utilized for commercial use only.

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4. Luminaires shall be low maintenance and environmentally friendly, all units shall be mercury free.

**END CHALICE 150 SINGLE POINT LUMINAIRE SPECIFICATION**