CHALICE 70 SINGLE POINT LED DOWNLIGHT RECESSED

1.01 Chalice 70 Recessed

1. General
    1. The luminaire shall be a full spectrum fixed white LED downlight employing a single 7,400 lumen emitter that is convection cooled. The Luminaire shall be the Chalice 70 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 92 CRI.
    4. The luminaire's light source shall incorporate silent, convection cooling without employing the use of fans or filters. Any luminaire not employing a light source 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. For DMX controlled models: The luminaire shall comply with USITT DMX-512 A and RDM ANSI E1.20 Standards.
    8. For Mains Dimmable models: The luminaire shall be able to be controlled from a phase cut dimming system in either forward or reverse phase (leading or trailing edge) and shall not require additional power sources for capacitance voltage control.
    9. The luminaire shall be constructed of a spun aluminum housing with steel fittings and attachment components, all free of pits and burrs.
    10. Standard finish shall be Epoxy Sandex White, electrostatic application. The luminaire shall be available with optional Black and additional custom color finishes available upon request.
    11. Each luminaire's power supply, cooling and electronics shall be integral to each unit.
    12. The housing shall serve as a directional chimney to guide heat away from the LED array, integral driver and integral power supply.
    13. The LED substrate is coupled to a highly efficient heat sink and cooling system for prolonged life of the LEDs.
    14. The luminaire shall be capable of, dependent upon model: both new construction and remodel installations. This luminaire shall have the capability for mounting either new construction or remodel units, and shall be interchangeable between the two different mounting types. Units not employing these mounting differentials shall not be accepted.

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2. Electrical
    1. Supply Voltage shall be 120 to 277VAC, 50/60Hz. (+/- 10% auto-ranging)
    2. The luminaires current draw shall not exceed 0.58 amps (120VAC) or 0.31 amps (220VAC) or 0.25 amps (277VAC) 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, 70 Watt LED chip.
    4. The luminaire shall be cETLus listed.
3. Control
    1. The DMX luminaire shall be equipped with an LED system compatible with standard 8-bit input, and utilizing PWM high resolution dimming.
    2. The Mains Dimmable luminaire shall be equipped with an LED control system compatible with both forward and reverse phase dimming systems, and utilizing a PWM high resolution dimming.
    3. The luminaire shall interact seamlessly with conventional sources.
    4. The luminaire shall be digitally driven using high-speed Pulse Width Modulation (PWM)
    5. The DMX 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 DMX model on the luminaire to prevent accidental change in luminaire configuration. Locking and unlocking the luminaire shall be via a predefined key sequence.
    7. Luminaire shall have an available “Master” function to provide control of intensity of additional luminaires on the DMX string, when applicable.
    8. Luminaire shall provide full range dimming performance based upon its DMX input control signal and configuration and shall be equipped with an LED system compatible with standard 8-bit input, with high resolution dimming.
    9. The luminaire shall be capable of standalone operation, activated and configured at the keypad.
4. Physical
    1. The Chalice 70 Downlight LED Light shall not exceed 12-inches in height by 6-inches in diameter, and shall be able to mount to the optional remodeler ring or new construction tray.
    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, Aircraft 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's LED.
    3. Luminaires shall be low maintenance and environmentally friendly, all units shall be mercury free.
    4. The unit shall be listed as a NON-IC and shall conform to listings thereof.

END CHALICE 70 SINGLE POINT RECESSED LUMINAIRE SPECIFICATION