LED HOUSE LIGHT FIXTURE

A. General

1. The fixture shall be a LED house light employing a warm white output LED engine. The fixture shall be an Inspire MD house light unit by Chroma-Q or approved equal.

2. The fixture shall be suitable for replacing conventional house light tungsten fixtures.

3. The fixture shall connect directly to a traditional external dimming system for control purposes.

4. The fixture shall be suitable for hanging pendant or flush-mount ceiling applications.

5. The fixture shall be UL 1573 listed for stage and studio use.

6. The colour rendering index of the fixture shall be 93 CRI.

7. Fixture colour temperature (CCT) shall be 3,000° Kelvin.

8. The fixture’s LED lamp life shall have a L70 rating at a minimum of 50,000 hours.

9. Fixtures shall be factory calibrated to ensure all units output the same exact colour.

10. Fixtures which do not comply with this specification shall not be accepted.

B. Physical

1. The fixture housing shall be constructed of robust anodised extruded aluminium and shall be free of pits and burrs.

2. The fixture housing shall provide additional protection built around the optics.

3. The fixture housing shall be available in either black and white colour.

4. Power supply, cooling and electronics shall be integral to each unit.

5. Fixture net weight (without fixings) shall be 6.0kg (13.5lbs.).

6. Fixture net dimensions (without fixings) shall be (W x H x D) 181mm x 404mm x 181mm (7” x 16” x 7”).

7. The fixture shall include a built-in mounting bracket with a 12.7mm (1/2”) diameter hole.
Optional accessories available shall include but not be limited to:

a. top hat/snoot (either black or white colour).
b. yoke mount kit (either black or white colour).
c. barndoor (either black or white colour).
d. blind sloped ceiling kit - 0 to 15 degree angle (either black or white colour trim).
e. blind sloped ceiling kit - 20 to 30 degree angle (either black or white colour trim).

C. Agency Compliance and Environmental

1. The fixture shall be UL Listed and shall be so labeled.
3. The IP rating of the fixture shall be IP20 for dry location use.

D. Thermal

1. The fixture shall be cooled via natural convention without the aid of fans.
2. The fixture shall operate in an ambient temperature range of 0°C (32°F) minimum, to 40° C (104°F) maximum ambient temperature.
3. The fixture shall provide automatic protection to reduce the output when the internal temperature reaches the maximum limit due to extreme ambient temperature conditions.

E. Electrical

1. The fixture shall be equipped with an internal power supply.
2. The power input rating for the fixture shall be 0-120VAC 60Hz 120VA.
3. The fixture’s power supply shall have a power factor of 0.9.
4. The fixture’s maximum power consumption shall not exceed 105W @ 120V.
5. The fixture’s stand-by power consumption shall be 0W @ 120V.
6. The fixture input power shall be via plug-in screw terminal.
F. Optical
   1. The fixture shall provide a smooth and symmetrical uniform wash output.
   2. The fixture shall be available with a choice of three beam angles (narrow, medium and wide).

G. Light Emitting Diodes
   1. The fixture shall be equipped with one warm white LED Engine.
   2. All LEDs used in the fixture shall be of high brightness and proven quality from reputable LED manufacturers.
   3. LED systems manufacturers shall utilize an advanced production LED binning process to maintain LED color consistency.
   4. LEDs shall be rated for a 50,000-hour LED life to 70% intensity (L70).
   5. The hot lumen output of the fixture shall be 6,000 lumens (with narrow lens).
   6. The hot lumen output of the fixture shall be 5,300 lumens when using a medium diffuser filter.

H. Dimming and Control
   1. The fixture shall use an external resistive dimmer for control purposes.
   2. The dimming curve shall be of theatrical grade for smooth dimming over longer timed fades and at low intensities.

END SPECIFICATION