



# **S60-RP**

## **LED Soft Light**

L I G H T I N G - P R O D U C T S P E C I F I C A T I O N

V1.0

## A. General

1. The luminaire shall be a Remote Phosphor LED soft light luminaire with an electronically controlled LED light source especially with the ability to change the remote phosphor panel as needed.
2. The luminaire shall be capable of providing high color rendition white light with remote phosphor panels in color temperatures of 2700 K, 3200 K, 4300 K, 5600 K, 6500 K, 10,000 K, and Chroma Green.
3. The precise continuous manipulation of intensity from 0% to 100% is mandatory.
4. All functions shall be controllable through USITT DMX 512A and fully RDM compatible and equipped with a feedback channel for reporting.
5. An on-board control shall be available to control intensity.
6. The luminaire shall be available as a manual and hanging pole operated version.

## B. Physical

1. The luminaire shall be constructed of rugged, aluminum and molded engineering grade fiber-reinforced thermoplastics.
2. The body of the fixture shall be available in blue/silver or matt black finish.
3. Technical requirements for the soft light luminaire:
  - a. The soft light luminaire shall have the dimensions not exceeding 813 mm (32") in length, 433 mm (17") in height without spigot, 548 mm (21.6") with spigot, and 133 mm (5.2") in width.
  - b. Light aperture shall have a dimension of 645 mm (25.4") by 300 mm (11.8") with a sturdy accessory, barn door and diffusion slot including a top latch to allow for additional accessories.
  - c. The stirrup shall be made of aluminum profile with a 28 mm (1 1/8") spigot.
  - d. High strength tilt lock shall guaranty secure locking to eliminate any movement or slippage to ensure the luminaire will stay in position.
  - e. Top plastic handle for carrying of lamphead and plastic foot for allowing the fixture to stand on a flat surface.
  - f. A tilt range of +/- 90° is required.
  - g. The beam angle shall be 115° HPA.
  - h. Weight for the manual version shall be 11.7 kg (25.8 lb.) and for the pole operated version 12.8 kg (28.1 lb.).
4. The luminaire shall be equipped with cooling fans.
5. The fan noise emission shall not exceed 20 dBA (1m) at any time.
6. The LED emitters used in the fixture should be rated for nominal 50,000-hour LED life to 70% intensity with an estimated color shift over lifetime less than 200 K.
7. The luminaire shall provide monitoring of the hours in use and the actual temperature.

## C. Electrical

1. The luminaire shall be furnished with an external power supply for 110 to 250 V AC 50/60Hz supply voltage.
2. The luminaire shall require power from a non-dim source.
3. The nominal power consumption shall be 410 W and shall not exceed 420 W at full output.
4. Available power cord options shall include but not be limited to:
  - a. powerCon TRUE1 cable with bare ends
  - b. powerCon TRUE1 cable and Edison connector
  - c. powerCon TRUE1 cable and Schuko connector
  - d. powerCon TRUE1 cable and Chinese connector
  - e. powerCon TRUE1 cable and Japanese connector

5. Only integrated light engines that will not emit light in the ultra-violet or the Infrared spectrum are acceptable.
6. A control and indicator panel for on-board control shall be available.
7. The fixture shall be equipped with an RDM/DMX interface.
8. An XLR 5-pin DMX in and XLR 5-pin DMX through shall be implemented.
9. A EtherCon LAN port shall be implemented.
10. An XLR 4-Pin port shall be implemented for battery power input in the range of 23 – 36 V DC.
11. An XLR 3-Pin port shall be implemented for 48 V DC power input from the SkyPanel PSU.
12. The fixture shall have a USB-A port used for updating the fixture's internal firmware, adjusting operating parameters, for service purposes, and for powering external devices.

## D. Optical

1. The optical system shall offer an interchangeable remote phosphor panels with a half peak angle of 115°. The luminaire should have soft, even beam of light and clean shadow rendition with following optical characteristics:
  - a. Aperture Dimension of 645 mm x 300 mm (25.4" x 11.8")
  - b. Color rendition index CRI of > 97, TLCI of > 96 (core CCTs)
  - c. Remote Phosphor panels with color temperatures of 2700 K, 3200 K, 4300 K, 5600 K, 6500 K, 10,000 K, and Chroma Green
  - d. Color temperature tolerance of +/- 100 K (nominal), +/- 1/8 Green-Magenta (nominal)
2. The manufacturer shall ensure that there will be no differences in the quality of the light field between production batches of the lighting fixtures.
3. Fixture should have the following photometric characteristics:

	<b>3 m / 9.8ft</b>	<b>5 m / 16.4 ft</b>	<b>7 m / 23.0 ft</b>	<b>9 m / 29.5 ft</b>
<b>2700 K</b>	1036 lx / 96 fc	373 lx / 35 fc	190 lx / 18 fc	115 lx / 11 fc
<b>3200 K</b>	1103 lx / 103 fc	397 lx / 37 fc	203 lx / 19 fc	123 lx / 11 fc
<b>4300 K</b>	1238 lx / 115 fc	446 lx / 41 fc	227 lx / 21 fc	138 lx / 13 fc
<b>5600 K</b>	1250 lx / 116 fc	450 lx / 42 fc	230 lx / 21 fc	139 lx / 13 fc
<b>6500 K</b>	1244 lx / 116 fc	448 lx / 42 fc	229 lx / 21 fc	138 lx / 13 fc
<b>10,000 K</b>	1288 lx / 120 fc	464 lx / 43 fc	237 lx / 22 fc	143 lx / 13 fc
<b>Chroma Green</b>	2052 lx / 191 fc	739 lx / 69 fc	377 lx / 35 fc	228 lx / 21 fc

## E. Environmental

1. The fixture shall be rated IP 20 for dry location use
2. The fixture shall operate in an ambient temperature range of -20°C (-4°F) to 45°C (113°F)
3. The fixture shall be in compliance with CE standards as well as ENEC and FCC certified
4. The fixture shall be UL LISTED, or equivalent certification, to the UL1573 standard for stage and studio use.

## F. Operation

1. It shall be possible to remote control the luminaire via DMX 512 A.
2. The fixture shall be fully RDM compatible and equipped with a feedback channel for reporting.
3. The fixture shall be fully Art-Net 3 enabled with DMX gateway capability
4. An onboard control with dot-matrix display for intensity control and to access the menu shall be available.
5. Special modes of operation should be available including, but not limited to:
  - a. Low End Dimming Mode: Provides lower light levels with enhanced CCT accuracy and color rendition
  - b. Dimming Curve Selection: Selection of four dimming curves including exponential, linear, logarithmic, and "S" curve
  - c. Master/Slave Mode: Allows for one fixture to control a group of several other ARRI fixtures
6. Other functions and setting of the lamphead should include:
  - a. Display Setup: Allows for control of the display illumination, brightness, contrast, Orientation, and error display setting
  - b. USB Functions: Allows for the saving of presets, fixture settings and error logs to an external USB stick
  - c. Low Battery Warning: Allows user to set a voltage whereby the lamphead will display a warning if a battery voltage should fall below
  - d. DMX Settings: Allows for the adjustment of DMX address, protocol, signal loss behavior, and protocol version
  - e. Art-Net Settings: Allows for the adjustment of Art-Net net, subnet, universe, merge mode, state, and gateway
  - f. IP Settings: Allows for the adjustment of the IP Mode and IP Address with the onboard control panel
7. The luminaire shall offer one 8 bit DMX profile, one 16 bit DMX profile, and one coarse/fine DMX profile, which can be pre-configured by the user.
8. The 8 bit profiles should include but not be limited to following operating mode:
  - a. Mode 1 shall require not more than 5 DMX channels and provide control over intensity and fan control
9. The 16 bit profiles should include but not be limited to following operating mode:
  - a. Mode 2 shall require not more than 6 DMX channels and provide control over intensity and fan control
10. The 8 bit profiles with additional coarse/fine option shall require 2 DMX channels for all functions that include the coarse/fine option and 1 DMX channel for all other functions
  - a. Mode 3 shall require not more than 6 channels and provide coarse/fine control for intensity and fan control

## G. Dimming

1. The fixture shall allow continuous linear and flicker free dimming from 0% to 100% in an 8 bit mode (0.3922% per step) or 16 bit mode (0.001529% per step).
2. Coarse and fine dimming shall be possible with 2 consecutive DMX channels in the 8 bit mode. The first channel shall allow setting the target value in 256 steps from 0 to 100% output value. The second channel shall allow an additional fine adjustment in 256 steps from 0 to 10% output value.

## H. Accessories

Following accessories shall be available

1. General accessories:
  - a. Safety cable
  - b. Junior pipe clamp
2. Following front end accessories:
  - a. 4-leaf barndoor
  - b. 8-Chamber eggcrate
  - c. SkyPanel Remote
  - d. Snoot
  - e. 30° Honeycomb
  - f. 60° Honeycomb
  - g. Remote Phosphor Panels
  - h. SkyBender
  - i. Extra Diffusion Slot
  - j. Chimera Light Banks
  - k. DoP choice light banks
  - l. Center Mount Yoke
  - m. Fixed Center Mount Yoke
  - n. Double Verticle Yoke
  - o. Battery Adapter Plate for Anton/Bauer
  - p. V-Mount Battery Adapter Plate
  - q. 0.5, 1, 3, 10, & 15 m DC Cable
  - r. 3m Daisy Chain Cable
  - s. Rail Mount Adapter for SkyPanel PSU
  - t. Super Clamp Adapter for SkyPanel PSU
  - u. Space Light Silk Mounting Adapter
  - v. Molded Case