

U.S. Department of Transportation Federal Aviation Administration

Advisory Circular

| LIGHTING SYSTEMS | Subject: | SPECIFICATION FOR L-884, POWER AND CONTROL UNIT FOR LAND AND HOLD SHORT LIGHTING SYSTEMS | Date: Initiated by: | 6/29/01 AAS-200 | AC No.: Change: | 150/5345-54A 1 | |
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1. PURPOSE This change is to provide a correction to paragraph **3.3.1.4**, **Painting and Finishing**, in the subject advisory circular (AC).

2. CANCELLATION. Paragraph **3.3.1.4**, Painting and Finishing, of AC 150/5345-54A, *Specification for L-884 Power and Control Unit for Land and Hold Short Lighting Systems*, dated August 7, 2000, is replaced.

3. BACKGROUND. This change allows for the certification of equipment that meets this specification by eliminating the stated requirement for oil proof and weatherproof paint due to non-availability.

4. APPLICATION. The change is immediate and provides a replacement for page 3 of the subject AC.

MEB

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c. Altitude. Any altitude from zero to 6,600 feet (2000 m).

3.2.2 Style II, Outdoor PCU. Equipment intended for outdoor installation shall be designed to operate properly under the following conditions:

- a. Temperature. Any ambient temperature from -67°F (-55°C) to 158°F (70°C).
- **b.** Humidity. Any relative humidity from 0% to 100% at an ambient temperature of 158°F (70°C).
- c. Altitude. Any altitude from zero to 6,600 feet (2000 m).
- d. Sand and Dust. Exposure to wind borne sand and dust particles.
- e. Windblown Rain. Exposure to windblown rain from any direction.
- f. Wind. Exposure to wind speeds up to 100 mph (161 km/hr) from any direction.
- g. Salt-Spray. Exposure to salt-laden atmosphere.
- h. Sunshine. Exposure to solar radiation.

3.3 Design Requirements.

3.3.1 Enclosures. All PCUs shall be housed in the appropriate NEMA style housing and shall provide suitable space for the installation of the communication interface(s) to provide the control requirement specified in paragraph 3.5 of this document. Each unit shall have a hinged access door with provisions for padlocking.

3.3.1.1 Style I, Indoor PCU. Style I, PCUs shall be housed in a stainless steel or aluminum NEMA Style 1 enclosure.

3.3.1.2 Style II, Outdoor PCU. Style II, PCUs shall be housed in a stainless steel or aluminum NEMA Style 4 or 4X enclosure. The total weight of each style II, PCU shall not exceed 100 lbs (46 kg). When style II, PCUs are installed in accordance with the manufacturer's instructions, the top of the unit shall not be higher than 42 inches (1070 mm) above the ground. PCU's designed for installation inside the runway and taxiway safety areas shall: not be higher than 30 inches above the ground, not exceed 75 lbs, and be installed with frangible couplings which conform to FAA drawing C-6046. (Runway Safety Areas (RSA) and Taxiway Safety Areas (TSA) are defined in AC 150/5300-13, *Airport Design Standards*.) The frangible coupling and mounting flanges shall be designed for use with 2-inch (51 mm) electrical metallic tubing (EMT) and shall be suitable for mounting on a concrete pad. The point of frangibility shall be located no higher than 3 inches above grade when installed.

3.3.1.3 Size. Each unit with enclosure shall comply with the following maximum dimensions: width 24 inches (610 mm), height 36 inches (915 mm), and depth 9 inches (228 mm).

3.3.1.4 Painting and Finishing. The inside and outside of the PCU enclosure shall be protected by at least one prime coat (or other suitable preparatory painting process) and one finish coat. Paint for the finish coat shall be high-quality paint suitable for the drying process used. Paint for the prime coat shall be suitable for the metal treatment involved. The color of the outside finish coat for all PCUs shall be color No. 12197, Federal Standard 595. The outside painted surface of the enclosure shall be free of scratches, blemishes, and chipping.

3.3.2 Control Cabinet. The control circuits, relays, sensing devices, control terminal block, remote/local control switch or keypad, and other low voltage control components shall be protected from the elements of the specified environment. This protection may be provided by the main enclosure or an additional cabinet/compartment installed inside the PCU. All low voltage control components shall be accessible by opening the housing (main enclosure, cabinet/compartment) in which they are installed.