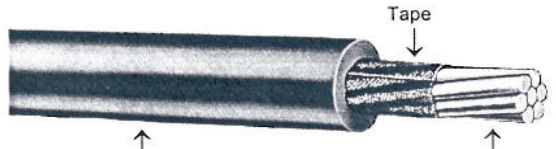


## ROME AIRPORT LIGHTING CABLE

Rome-XLP Insulation, 600 and 5000 Volts

FAA-L-824, Type C

<p>APPLICATION: Airport Lighting and Control Circuits. Rated 600 Volts or 5000 Volts as indicated, 90°C conductor temperature in wet or dry conditions. Single conductor 600 Volt and 5000 Volts, Type C.</p> <p>STANDARDS:</p> <ol style="list-style-type: none"> <li>1. Approved under FAA Advisory Circular 150/5345-7D, Specification L-824 Underground Electrical Cable for Airport Lighting Circuits.</li> <li>2. Approved by City of Los Angeles as Airfield Lighting Conductor (8 AWG, 5 kV Nonshielded).</li> </ol> <p>CONSTRUCTION: 600 Volt - annealed uncoated stranded copper conductor, Rome-XLP (crosslinked polyethylene) insulation, surface printed. 5000 Volt, annealed uncoated stranded copper conductor, separator tape, Rome-XLP insulation, surface printed.</p>		 <p>The diagram shows a cross-section of the cable. The outermost layer is labeled 'Rome-XLP Insulation'. Inside this is a layer of 'Tape'. The center contains several 'Copper Conductors'.</p>		
Size AWG	No. of Strands	Insulation Thickness Mils	Nominal Diam. Inches	Approx. Net Wt. Lb./1000 Ft.
<b>600 Volt</b>				
12	7	45	.19	32
10	7	45	.21	45
8	7	60	.27	72
6	7	60	.31	105
4	7	60	.36	155
<b>5000 Volt</b>				
8	7	110	.38	89
6	7	110	.41	125
4	7	110	.46	180

- NOTES: 1. For single conductor 600 volt cables in sizes 12-4 AWG, refer to SPEC 2150.  
 2. For single conductor 5000 volt nonshielded cables in sizes 8-4 AWG, SPEC 7155 is also recognized for airport lighting applications.  
 3. For single conductor 5000 volts shielded cables in sizes 8-4 AWG, refer to SPEC 7160.  
 4. Multiconductor 600 volt cables are also available. Refer to SPEC 3625 for multiconductor cables in sizes 12-10 AWG. Multiconductor cables in sizes 8-4 AWG may be furnished on request.  
 5. Multiconductor 5000 volt cables, both shielded and nonshielded, are available on request.  
 6. Size 8 AWG with tinned copper conductor conforming to MIL-C-38359, Class 2 (3001-5000 Volts), Airport Lighting Cable available upon request.  
 7. AC 150/5345-7D refers to ICEA Standards which have been withdrawn. Products referred to in Notes 1-5 comply with current ICEA Standards. Requirements are identical.

Information on this sheet subject to change without notice.

Specification

## ROME AIRPORT LIGHTING CABLE

Rome-XLP Insulation, 600 and 5000 Volts

FAA-L-824, Type C

### 1. SCOPE

- 1.1 This specification describes single conductor Rome-XLP (thermosetting crosslinked polyethylene) insulated cable rated 600 volts or 5000 volts nonshielded for use in airport control and lighting circuits at conductor temperatures up to 90°C in wet or dry conditions. Cables are suitable for use in conduit, duct, aerial and direct earth burial applications.

### 2. STANDARDS

- 2.1 The following standards shall be a part of this specification:
  - 2.1.1 FAA Advisory Circular 150/5345-7D Specification L-824 Underground Electrical Cable for Airport Lighting Circuits.
  - 2.1.2 ICEA Pub. No. S-95-658, NEMA Pub. No. WC70 for Nonshielded Power Cables Rated 2000 Volts or Less.
  - 2.1.3 ICEA Pub. No. S-96-659, NEMA Pub. No. WC71 for Nonshielded Cables Rated 2001-5000 Volts.
  - 2.1.4 ICEA Pub. No. S-66-524, NEMA Pub. WC7, for Crosslinked-thermosetting-polyethylene-insulated Wire and Cable. (Withdrawn Standard)

### 3. CONDUCTOR

- 3.1 Class B stranded annealed uncoated copper per Part 2 of ICEA. Sizes shall be 12-4 AWG for 600 volt rated cable and 8-4 AWG for 5000 volt rated cable.

### 4. SEPARATOR

- 4.1 A suitable separator over the conductor may be used on 600 volt rated cable. On 5000 volt rated cable, the conductor shall be covered with an opaque polyester tape or a semiconducting tape at the option of the manufacturer.
- 4.2 The semiconducting tape conductor shield, if used, shall meet the requirements of Part 3 of ICEA S-96-659.

### 5. INSULATION

- 5.1 Directly over the conductor or conductor separator shall be applied a homogeneous wall of black Rome-XLP insulation. The average thickness of insulation shall be 45 mils for size 12-10 AWG and 60 mils for size 8-4 AWG of 600 volt rated cables and 110 mils for 5000 volt rated nonshielded cable. Minimum thickness at any point shall be not less than 90% of the specified thickness.
- 5.2 Physical and electrical properties of the insulation on 600 volt rated cable shall be in accordance with Table 3-7, Class X-2 of ICEA S-95-658 and Par. 3.6 of ICEA S-66-524. Physical and electrical properties of 5000 volt rated cable shall be in accordance with Table 4-5, Type X-1 of ICEA S-96-659 and Par. 3.7 and 7.6.4 of ICEA S-66-524.

### 6. IDENTIFICATION

- 6.1 All cable shall be identified by means of surface ink printing indicating manufacturer's identification, size, insulation type, and applicable voltage rating. The 5000 volt nonshielded cable shall also be printed "FAA L-824 Type C".

### 7. TESTS

- 7.1 Cable shall be tested in accordance with FAA Advisory Circular 150/5345-7D and ICEA. Certified Test Reports may be furnished, if requested prior to production of the cable.