

**DATE: 3-18-05**

## PRODUCT SPECIFICATION 11795 E

**TYPE:** Crosslinked Polyethylene Insulated  
Unshielded Underground Electrical Cable  
For Airport Lighting Circuits  
5000 Volts, 90°C  
FAA L-824 Type C

**CONFORMS TO:** FAA Advisory Circular AC 150/5345-7E Dated 8/2/01  
ICEA S-96-659 and Certified by Intertek Testing

**SIZE:** 8 AWG Thru 4 AWG – Single Conductor

**I. SCOPE:**

This specification covers the requirements for single conductor Crosslinked Polyethylene insulated underground electrical cables for installation in ducts or conduit or in trenches by direct burial.

**II. CONSTRUCTION DATA:**

SIZE (AWG)	STRANDING	NOMINAL CONDUCTOR DIAMETER	INSULATION MIN. AVG. WALL (MILS)	APPROX. OUTSIDE DIAMETER (INCHES)	NOMINAL CONDUCTOR RESISTANCE (OHMS/M FT.) @ 25°C
8	7 x .0486"	.146"	110	.370	.652
8	19 x .0295"	.146"	110	.370	.652
6	7 x .0612"	.184"	110	.410	.411
6	19 x .0372"	.184"	110	.410	.411
4	7 x .0772"	.232"	110	.460	.258
4	19 x .0372"	.232"	110	.460	.258

- A. **STRANDED CONDUCTOR:** The conductor consists of Class B or C concentric stranded, annealed uncoated copper conforming to ASTM Standards B-3 and B-8.
- B. **SEPARATOR:** A suitable separator tape shall be applied over the conductor.
- C. **INSULATION:** Black Crosslinked Polyethylene (XLPE) conforming to ICEA S-96-659 Part 4.
- D. **SURFACE MARKING:** The insulated conductor shall be surface printed with the following information:

“(SIZE) AWG -- 5000 VOLTS -- A.I.W. CORP. FAA L-824 TYPE C”

### **III. TESTING:**

- A. **ELECTRICAL TESTS:**
  - 1. AC High Voltage Test: 13.0 KV for 5 Min.
  - 2. Insulation Resistance: K Value = 20,000 Min.
- B. **PHYSICAL TESTS:** The insulation shall be tested in accordance with the requirements of ICEA S-96-659.