

RW-010
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**ENGINEERING AND OPERATIONS
NORTHERN AIRPORTS**

**SPECIFICATION FOR AIRPORT SERIES
LIGHTING CABLE FOR USE IN
MEDIUM INTENSITY AIRFIELD LIGHTING SYSTEMS**

Manitoba
Transportation and
Government Services



**TRANSPORTATION AND GOVERNMENT SERVICES
NORTHERN AIRPORTS**

**SPECIFICATIONS FOR AIRPORT
SERIES LIGHTING CABLE
SUITABLE FOR DIRECT EARTH BURIAL
(CSA TYPE DESIGNATION: ASLC)**

1. SCOPE

1.01 This specification defines the general requirements applicable to Airport Series Lighting Cable. The intent of this specification is to establish minimum acceptable electrical, mechanical, design and performance requirements, which all Airport Series Lighting Cable shall meet to ensure satisfactory and reliable operation. It is not intended to impose restrictions upon design or materials, which conform to CSA standards. All CSA standards, current CSA specifications at time of contract, not specifically mentioned in this specification shall stand. Where there is a conflict between this specification and the latest CSA standard, this specification shall apply.

2. REQUIREMENTS

2.01 ASLC shall be manufactured in accordance with CSA C22.2 No.179.

2.02 The cable shall be suitable for use in metallic or non-metallic raceways and direct earth burial in wet or dry locations.

2.03 Cable construction as follows:

- Conductor: Bare, 7 strand, compressed copper Size #8 AWG
- Insulation: black cross-linked polyethylene with a minimum average thickness of 2.8mm
- Conductor Shield: extruded semi-conducting cross-linked polyethylene, 0.5mm thick
- Rated voltage: 5000 volts

2.04 The outside diameter of ASLC cable shall match primary connector kits supplied by the manufacture. Immediately upon award of the purchase order, the cable supplier shall supply a cable specification to the manufacture of the primary connection kits for appropriate sizing.

2.05 The cable shall be delivered in non returnable reels of 915 metres per reel.

- 2.06 The cable shall be clearly identified at 1 metre intervals for the entire length of each reel with the following information:
- the name of the manufacturer
 - the date of manufacture
 - the cable specification number/type
 - the rated voltage
 - the conductor size
- 2.07 The cable shall be marked to show the remaining length of cable (in metres) remaining on the reel. This marking shall also be at 1 metre intervals.

3. WARRANTY

- 3.01 The cable shall be guaranteed against failure for one year from date of acceptance by the Traffic Engineering Branch of the Department of Transportation and Government Services, Province of Manitoba.

4. INSPECTION AND ACCEPTANCE

- 4.01 Prior to delivery the vendor shall provide a 1 m sample of the cable being supplied along with all testing and technical documentation.

Airport Series Lighting Cable that conform to this specification and are not currently in use by this Department shall be submitted to the Traffic Signal Workshop for a one-year evaluation period by Department personnel. At the end of the evaluation period the supplier shall be advised by the Traffic Operations Engineer if the equipment submitted for evaluation is acceptable to this Department.

The total cost of supplying this cable for evaluation shall be borne by the supplier. The bidder shall complete the attached "Specification Compliance Summary" (attached). Failure to complete the summary will result in disqualification from the bidding.

- 4.02 All shipments of cable shall be delivered to the Mechanical Equipment Warehouse facility at 1550 Dublin Avenue, Winnipeg, Manitoba. At that time they shall be inspected by the Traffic Engineering Branch of the Department of Transportation and Government Services, Province of Manitoba.

Acceptance shall be based on the supplied equipment meeting the requirements of this specification.

For technical information please contact Mark Seniuk at (204) 945-7335 office, or (204) 799-8682 cellular.