

Raw Material Specification Sheet

Lake Cable Part #: <u>W20TC7/.0126-L.750-CON</u>

Description: 20 AWG 7 Strands, Annealed Tinned Copper

1. Conductor and Assembly

1.1. AWG Size:	20 AWG
1.2. Strands:	7
1.3. Material:	Annealed Tinned Copper
1.4. Lay Direction/Length:	Left Hand 0.750 inches, per ASTM B8
1.5. Class:	В
1.6. Designation:	Concentric
1.7. Diameter:	0.0378 inches \pm 0.002 inches
1.8. DC Resistance:	36.7000 Ω/km, Max. @ 20°C per UL 1581
1.9. Copper Area:	1,100 CMA nominal, \pm 2% tolerance
1.10. Weight:	3.20 #/MFT
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2. Conforming Specifications

- 2.1. ASTM B8, latest Revision
- 2.2. ASTM B33, latest revision
- 2.3. UL 1581, latest revision

3. Requirements for Joints

- 3.1. Splices may be used as long as they meet the following:
 - 3.1.1. The break strength shall not be reduced by more than 20%
 - 3.1.2. The resistance shall not be increased
 - 3.1.3. The diameter of the splice must not exceed the diameter of the uninsulated conductor
 - 3.1.4. There shall be no broken or high strands
 - 3.1.5. Strands shall be free of oxidation, grease and burns

4. Requirements for Stranding

- 4.1. The total number of strands shall be 7 (-0 / +0)
- 4.2. The individual strand diameter shall be 7 strands 0.0126 inches \pm 0.0001 inches
- 4.3. The average diameter of the strands shall be such that the DCR stays under the maximum value allowed.

5. Requirements for Materials and Manufacturing

5.1. The conductor shall be fabricated from copper of such quality and purity that the finished product shall have the properties and characteristics prescribed in this specification as well as being in compliance with ASTM B8 and ASTM B33.

6. Requirements for Mechanical Properties

6.1. Conductor shall have a minimum elongation per ASTM B8 and ASTM B33, latest revision.

7. Requirements for Packaging and Size

- 7.1. Suitable packaging to protect against damage during shipment and handling to the coil and/or skid.
- 7.2. No less than 16,500ft per reel, quantities over 16,500ft must be in total multiples of 11,000ft or as discussed in negotiations. 48" reels are required or as discussed in negotiations.

8. Requirements for Labeling of Individual Coils

- 8.1. Coil production number
- 8.2. Net Weight
- 8.3. Length
- 8.4. Manufacturer's name, brand or trademark
- 8.5. Date Manufactured



9. Requirements for Workmanship

9.1. The conductor shall be free of defects, however blemishes of a nature that do not interfere with the intended application are allowed.

10. Requirements for Sampling

10.1. Routine sampling and analysis is at the discretion of Lake Cable.

11. Requirements for Retest and Rejection

- 11.1. If any failure occurs, the materials may be retested to establish conformity in accordance with agreement between the purchaser and the seller.
- 11.2. Product that fails to conform to the requirements of the product specification may be rejected per lot basis

12. Certification and Other

- 12.1. When specified by contract or Purchase Order, the supplier shall furnish to the purchaser <u>Suppliertechdata@lakecable.com</u> a certification representative of the shipping lot indicating that requirements have been met per this specification.
- 12.2. When specified by contract or purchase order, a report of test results shall be furnished to <u>Suppliertechdata@lakecable.com</u>.

13. Lake Cable Approv 13.1. Engineering:	val: Rick Danczyk	Signature	Donne
13.2. Quality:	Wendy Troke	Signature	6 Trake
13.3. Purchasing:	Jack Rosenthal	Signature	
14. Supplier Approval		1	
Name			
Department			
Signature			Date
15. Dated Issued: July	7, 2019	Date Revised: N/a	Document Number: Rev 0