



Raw Material Specification Sheet

Lake Cable Part #: W4BC19/787-L2.500-787

Description: 4 AWG 19 Strands, Annealed Bare Copper

1. Conductor and Assembly

- 1.1. AWG Size: 4 AWG
- 1.2. Strands: 19
- 1.3. Material: Annealed Bare Copper
- 1.4. Designation: 19 Wire Combination Unilay-Stranded
- 1.5. Lay Direction/Length: Left Hand 2.500 inches, minimum and maximum per ASTM B787/B787M
- 1.6. Diameter: 0.226 inches + 0.00226/ - 0.00452 inches
- 1.7. DC Resistance: 0.8481 Ω/km, Max. @ 20° C per UL 1581
- 1.8. Copper Area: 41,740 CMA nominal, -2% tolerance per ASTM B787/B787M
- 1.9. Weight: 128.5 #/MFT

2. Conforming Specifications

- 2.1. ASTM B3, latest revision
- 2.2. ASTM B787/B787M, latest revision
- 2.3. UL 1581, latest revision
- 2.4. RoHS 3, or latest revision
- 2.5. REACH 191, or 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 19 (-0 / +0).
- 4.2. The individual strand diameter shall be 13 strands 0.0507, ± 0.001014 inches and 6 strands 0.0371, ± 0.000742 inches.
- 4.3. The average diameter of the strands shall be such that the DCR stays under the maximum value allowed and the CMA shall be above the minimum in section 1.8.

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 complying with ASTM B787/B787M and ASTM B3.

6. Requirements for Mechanical Properties

- 6.1. Conductor shall have a minimum elongation per ASTM B787/B787M and ASTM B3, latest revisions.

7. Requirements for Packaging and Size

- 7.1. Suitable packaging to protect against damage during shipment and handling to the coil and/or skid.

Your signature constitutes that you have read and agreed to this specification sheet and upon confirmation of this purchase specification, no changes are allowed without express written approval of Lake Cable's purchasing department

Signature

Company

Date



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
- 8.6. Lake Cable PN
- 8.7. Lake Cable PO

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 Suppliertechdata@lakecable.com 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 Suppliertechdata@lakecable.com.

13. Product Deviations

- 13.1. Supplier must request approval from purchaser for all relevant product and process changes before such changes take place.
- 13.2. Lake Cable shall be notified prior to any component, recipe or process change and reserves the right to seek any and all remedies if those unannounced changes result in material or collateral damage to Lake Cable or its customers.

14. Lake Cable Approval:

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| 14.1. Engineering: M Saad | Signature |  |
| 14.2. Purchasing: Jack Rosenthal | Signature |  |
| 14.3. Designer: Juan Juarez | Signature |  |

15. Dated Issued: 01/23/2019 Date revised: N/A Document Number: Rev 0