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Aerial Wire Markers for ACSS

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01	10/22/2025	Initial Release

Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
002-87810	87810	01	10/22/2025

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1. Introduction

This is a general specification that covers the minimum requirements for aerial wire markers for ACSS to be used in the Transmission System in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site specific conditions, quantity, and other requirements. This document includes the general characteristics of the product.

2. Special Requirements

Samples shall be furnished as requested by LUMA Energy. Vendors that have supplied this product to LUMA on previous orders, will not have to furnish samples at bid opening. The product will be received at LUMA's general warehouse (017) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

3. Literature

- 3.1. Descriptive and technical literature must be supplied by the vendor at time of bidding. This literature must include, but is not limited to, details of material, drawings, documented testing, and instructions for use and installation. **The literature must be an official document from and certified by the manufacturer.** Failure to submit documents on time and duly certified by the manufacturer will cause bidder disqualification.
- 3.2. If required by LUMA, final drawings and documentation shall be submitted by the vendor before the manufacturing and shipping process for approval.

4. Compatible with

For compatible manufacturer and model see Table 1. These models are examples of the product described in this document and do not represent a preference. LUMA will evaluate equally any model not listed here during any acquisition event

5. Markings

- 5.1. Containers shall be marked outside with LUMA Energy's purchase order and item number.
- 5.2. Individual package(s) shall be clearly marked with manufacturer name and item information (part number, serial number, quantity, etc.).
- 5.3. Packaging labels and tags shall be waterproof.

6. Packaging

- 6.1. All products shall be packaged and marked in such a way as to facilitate handling and protection from damage and that the receiving warehouse can readily identify it and send it, in one complete unit, to a field location without opening crates or boxes to sort items and/or parts.
- 6.2. A list of all parts included in the container and/or package must be provided at delivery time so the receiving personnel can verify that everything requested is present, avoiding any delay in the receiving process.

7. Number Per Package (Logistics)

Standard package: One (1) unit per box or as requested by LUMA.

8. Acceptance Criteria

- 8.1. Test required: certified by external qualified laboratories.
- 8.2. Product shall be manufactured in accordance with the latest issue below (section 8.3). When conflicts occur between purchaser's specifications and the latest issue below, the purchaser's specification shall prevail.
- 8.3. Latest applicable codes, standards, and other regulations.
- 8.4. If any other standard different from the ones indicated in this document is used, the supplier must provide information showing compatibility with the required ones.

9. Description

- 9.1. Aerial wire marker to be applied to overhead power lines marking transmission lines along the flight path.
- 9.2. Shall be compatible with ACSS and rated up to 250°C and 230 kV.
- 9.3. Material shall be aluminum.
- 9.4. Shall be able to withstand corona effect at voltages up to 230 kV.
- 9.5. Diameter shall be 24 in.
- 9.6. Color shall be orange.
- 9.7. Shall be furnished with a reflective tape that makes the marker visible a minimum of 2,500 feet away at night.
- 9.8. Assembly shall include the two halves of the marker, with one of them furnished with two clamps and a channel used for attachment to the conductor.
- 9.9. Shall be compatible with the following conductors with OD range of 0.6 to 1.15:
 - a. Partridge 226.8 (26/7) ACSS
 - b. Parakeet 556.5 (24/7) ACSS
 - c. Drake 795 (26/7) ACSS

10. Inspection

- 10.1. Upon inspection of incoming product, the purchaser reserves the right to refuse product shipments and to determine the acceptability or rejection of the product received. The supplier shall be liable for all costs incurred for a product that is rejected.
- 10.2. The acceptance of any product shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it would not prevent subsequent rejection if such products were found later to be defective.

11. Proposal Information

- 11.1. Submitted proposals must include:
 - a. Technical information, drawings, and tests.
 - b. Table of Compliance completed by the bidder with reference (see Appendix 1).

12. Table 1: Warehouse and Asset Suite Identification Number

Warehouse Catalog #	Asset Suite #	Conductor Size (ACSS)	Conductor Diameter (in.)	Compatible model
002-87810	87810	266.8 (26/7) 556.5 (24/7) 795 (26/7)	0.642 0.914 1.107	Spanguard AL24-O

- End of Specification -

Appendix

Appendix 1: Table of Compliance

Line	Description	Pass/Fail (P / F)	Comments
1	Compliance with the document 4751.50.009		
2	Industry standards		
3	Tech. info. and drawings provided.		
4	Compatible with ACSS with temperature up to 250°C.		
5	Material shall be aluminum.		
6	Withstand corona effect at voltages up to 230 kV		
7	Diameter shall be 24 in.		
8	Color: Orange		
9	Furnished with a reflective tape		
10	Assembly shall include the two halves of the marker, with one of them furnished with two clamps and a channel used for attachment to the conductor		
11	Shall be compatible with the following conductors (see Table 1) with OD range of 0.6 to 1.15:		

NOTE: This table is only a checklist for reference. The compliance must be with the complete document. Filling out the table with "PASS" won't be accepted as a compliance without the technical information required to certify it.












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