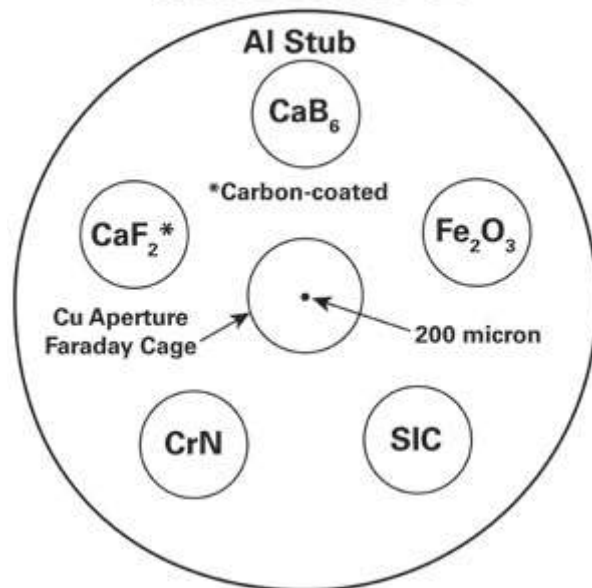


Certificate of Suitability for Purpose

PELCO® XCS-12 EDS Calibration Standard

Product Number 659-12

PELCO® XCS-12



Purpose of standard: Calibration of EDS detector light element response.

Number of reference standards: 6

Composition and use of standard:

- 1) Iron Oxide Fe₂O₃ (mineral haematite – no EDS detectible contaminants)
- 2) Silicon Carbide - SiC (Norton)
- 3) Chromium Nitride – CrN (5um + thick sputtered layer on silicon substrate.)
- 4) Calcium Hexaboride - CaB₆ (Alfa Aesar 99% metal base)
- 5) Calcium Fluoride - CaF₂ (mineral Fluorite - no EDS detectible contaminants) Carbon coated.
- 6) Copper aperture (3.05 mm diameter 200 µm) – to be used as Faraday cup and for EDS calibration.

These materials are mounted and embedded with silver-loaded epoxy cement in a 12.7 mm diameter aluminum pin stub and polished to 1 µm finish. The aluminum used to make the stub is free-machining grade and may contain alloying inclusions of Cu/Bi/Pb.

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