

# Excellent performance of 650 MHz single-cell niobium cavity after electropolishing

*Thursday 29 August 2024 16:00 (2 hours)*

The electropolishing process and cathodes have undergone modification and optimization for both low- and high-beta 650 MHz five-cell niobium cavities. Cavities treated with these novel electropolishing conditions exhibited superb surface quality and performance in baseline tests. Nonetheless, due to administrative constraints on project cavities, maximum gradient performance testing was not conducted. This paper presents a study conducted on a single-cell 650 MHz cavity utilizing the optimized electropolishing conditions, highlighting the maximum performance attained for this specific cavity.

## Footnotes

## Funding Agency

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