

LCLS-II LINAC 2.0 K COMMISSIONING

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In 2023, SLAC commissioned a continuous-wave superconducting linear accelerator (CW SCRF Linac) to bolster its new Linac Coherent Light Source (LCLS-II). The Linac comprises of 37 cryomodels operating at 2.0 K. Achieving the 2.0 K temperature in the Linac involves reducing the liquid helium saturation pressure to 31 mbar using a series of centrifugal compressors, commonly referred to as cold compressors. This paper presents the commissioning of the Linac at 2.0 K, with a focus on the cryoplant capacity and heatloads at 2.0 K.

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