SRRC/ANL High Current L-Band Single Cell Photocathode RF Gun\*, C.H. HO, S.Y. HO, G.Y. HSIUNG, J.Y. HWANG, T.T. YANG, SRRC; M. CONDE, W. GAI, R. KONECNY, J. POWER, P. SCHOESSOW, ANL - A high current L-band photocathode rf gun is under development at SRRC (Synchrotron Radiation Research Center, Taiwan) in collaboration with ANL (Argonne National Laboratory, USA). The goal is to produce up to 100 nC charge with the surface field gradient of over 90 MV/m at the center of the photocathode. In this report, we present the detailed design and initial test results. If successful, this gun will be used as the future AWA (Argonne Wakefield Accelerator) high current gun.

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