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Temporally Resolved Emissivity and Temperature Measurements of Quartz on a Light Gas Gun MINTA AKIN, RICKY CHAU, JEFFREY NGUYEN, J. REED PATTERSON, W. PAT AMBROSE, NEIL HOLMES, Lawrence Livermore National Laboratory — Emissivity has long been neglected in pyrometric measurements on shocked samples. We have built and tested a broad spectrum apparatus and developed a new target design to dynamically measure reflectance and calculate emissivity on a two stage light gas gun. Using this system, we have measured the emission of Quartz and Fused silica near melt. This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

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