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Quartz Detector for the SuperHMS Spectrometer at Hall-C Jefferson Lab[1] ABDELLAH AHMIDOUCH, SAMUEL DANAGOULIAN, BENJAMIN GRIEGO, DEMETRIA CAMPBELL, SHARON SPRATT, North Carolina A&T State University, CHARLES PERDRISAT, College of William and Mary, HOWARD FENKER, Jefferson Lab — We have developed and constructed a quartz hodoscope to be part of the trigger system for the Super High Momentum Spectrometer (SHMS). The SHMS spectrometer will play a central role in carrying out the 12-GeVphysics program at Hall-C Jefferson Lab. The hodoscope consists of twenty one fused silica bars. Each bar is 125-cm long, 5.5-cm wide, and 2.5-cm thick. It is viewed by a UV-sensitive PMT on each end. The quartz hodoscope task is to provide a clean detection of charged particles, a high level of background suppression, and an accurate tracking efficiency determination. We present results of tests leading to the construction of the hodoscope, as well performance test results of the completed detectors such as detection efficiency and position resolution.

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