## 1. Supplemental Data



**Figure 1.** Supplemental Data Figure 1: Unprocessed scans for full RCF stack for 5 nm DLC, CP (fig. 2a in text)



**Figure 2.** Supplemental Data Figure 2: Unprocessed scans for full RCF stack for 10 nm DLC, LP (fig. 2b in text)



**Figure 3.** Supplemental Data Figure 3: Unprocessed scans for full RCF stack for 20 nm DLC, CP (fig. 2c in text)



**Figure 4.** Supplemental Data Figure 4: Unprocessed scans for full RCF stack for 100 nm DLC, LP (fig. 2d in text)



**Figure 5.** Supplemental Data Figure 5: Red channel from RCF layers at the rear of the stack for a shot with d0=5 nm DLC, CP (same shot as fig. 2a and supplemental figure 1), showing inferred electron beam at the rear of the stack.