

Question:

My old LabScanXE flashed 5 times per reading and my new ColorFlexEZ only flashes once. Was my LabScanXE doing the average of five readings or averaging the signal from the 5 flashes into a single reading?

In simple terms the LabScan XE is averaging the signal from the 5 lamp Bursts into a single reading and the ColorFlex is using the signal from a single Burst of light. These bursts are of different time durations and the durations are sampled multiple times during the Analog to Digital conversion stage of the measurement. The goal is to minimize the difference that would occur when measuring the same specimen multiple times. The ColorFlex uses Annular 45a/0 optical geometry and the LabScanXE uses Circumferential 0/45c optical geometry. These optical geometries have different efficiencies requiring levels of light, hence the different Bursts needed to achieve acceptable repeatability.