



Save Analysis Time With PROMT, Without Compromising Precision

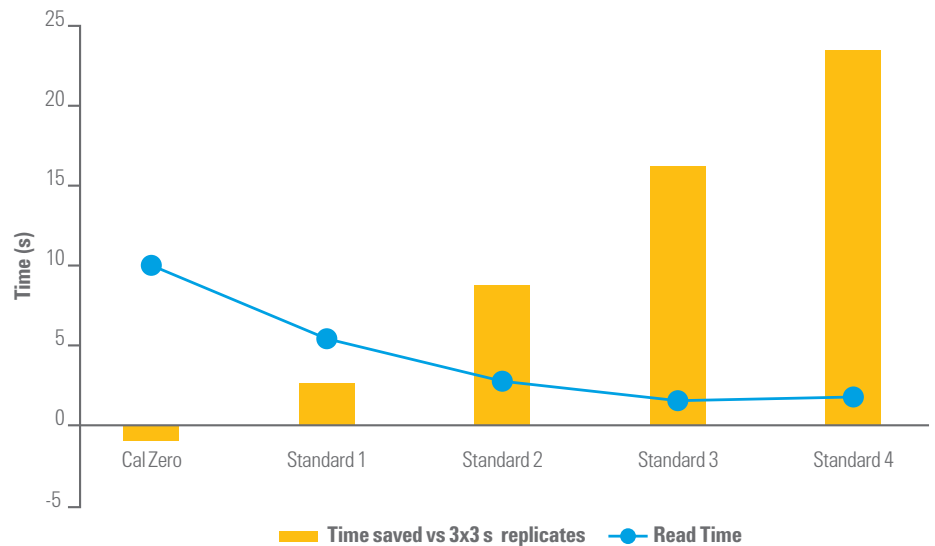
Agilent Flame AA

PROMT mode offers:

- Increased productivity, particularly for high concentration samples, compared to conventional Flame Atomic Absorption Spectrometry (FAAS), allowing more samples to be measured per hour
- Reduced gas consumption, resulting in lower running costs
- Further analysis time reduction when combined with Fast Sequential acquisition mode, with gas consumption and analysis time reduced by over 60%.

Achieve High Speed Flame AA Without Compromising Precision

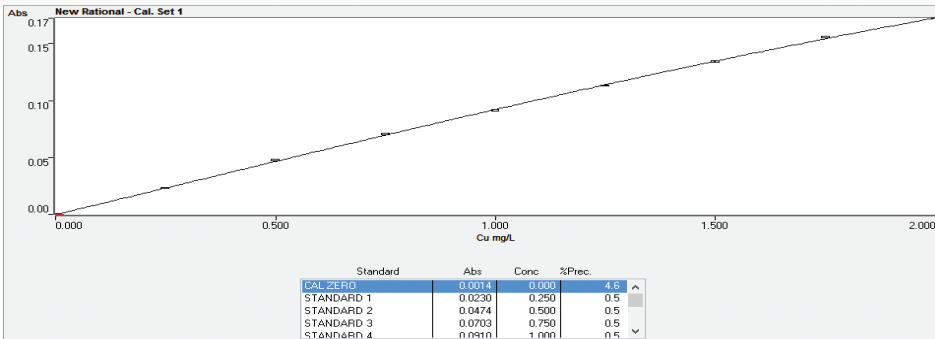
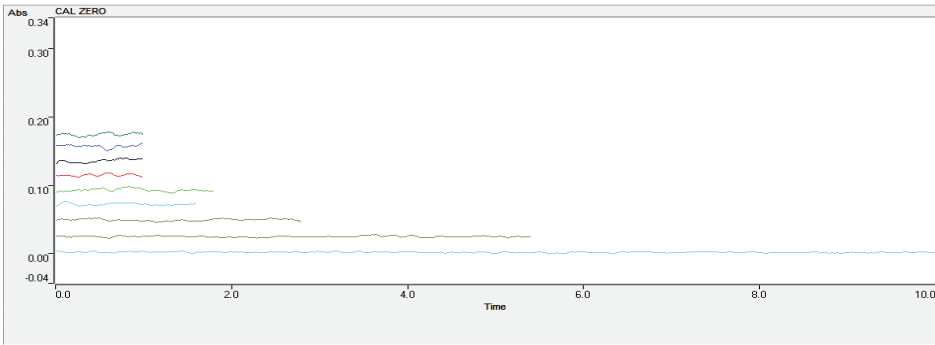
Agilent's 240FS and 280FS Flame AA spectrometers feature a PRecision Optimized Measurement Time (PROMT) mode that allows the operator to set the level of precision (%RSD) they want for sample results. This optimizes the sample read time, with high concentration elements requiring less read time than low concentration elements to achieve the same level of precision.



Solution	Conc (ppm)	Abs	Read Time (s)	% RSD	Time saved* (s)
Cal Zero	0	0.0015	10	4.6	-1
Standard 1	0.25	0.0230	5.4	0.5	2.6
Standard 2	0.5	0.0474	2.8	0.5	8.8
Standard 3	0.75	0.0703	1.6	0.5	16.2
Standard 4	1	0.0910	1.8	0.5	23.4

Example: Measuring Cu at 324.8 nm in 5 samples with 0.5% RSD set in PROMT mode. Total analysis time was less than half of that using 3 replicates of 3 second read time for each sample.

*Time saved compared to 3 x 3 s replicates



In this example, the precision for both standards and samples was set to 0.5 %RSD with a total potential integration time of 10 seconds. If the analyte concentration was too low for the precision to be met the software integrated the signal for the full 10 seconds. As the signal graphic (top) shows, the higher concentration standards achieved the required RSD in less time.