The diagram shows the following process:

1. The input signal $r(t)$ passes through an anti-aliasing lowpass filter.
2. The filtered signal is converted to a discrete signal by the A/D converter.
3. The discrete signal $r(n)$ is multiplied by the windowing function $w(n)$.
4. The windowed signal is subjected to the Fast Fourier Transform (FFT) to obtain $Y(n)$.
5. The magnitude squared of $Y(n)$, denoted as $|Y(n)|^2$, is calculated.
6. The magnitude squared values are averaged $M$ times.
7. The final result is the test statistic $T$. 

The process includes windowing, which is indicated by the notation $(\text{windowing})$. The input signal is denoted as $r(t)$, the discrete signal as $r(n)$, the FFT output as $Y(n)$, and the test statistic as $T$.