PHOTOACTIVATION DEVICE AND METHOD OF CONTROLLING THE SAME

ABSTRACT OF THE DISCLOSURE

A photoactivation device for viability PCR is provided. The photoactivation device includes a light source, a group of optics, a cooling module, and a control module. The light source illuminates bio samples with a designated wavelength for photoactivation. The group of optics includes a diffusing optics and a reflective film to homogenize optical beam for uniform lighting. The cooling module maintains temperature of the bio samples and prevents degradation. The control module controls optical intensity, exposure time of the light source, and temperature of the photoactivation device.

Figure 4