

# Virginia Department of Forensic Science

## Mitochondrial DNA

### UV Lamp Intensity Calibration

Periodically, over the lifespan of the UV bulb the amount of energy delivered will vary. The amount of energy delivered must be estimated so that sufficient irradiation of laboratory equipment will produce a sterilizing effect. This is accomplished by measuring the amount of time the UV equipment takes to deliver 0.9999 J/cm<sup>2</sup> (essentially 1 J/cm<sup>2</sup>).

### Materials Required

- Timer
- UV Crosslinker

### Calibration

Choose 'Energy' mode on the crosslinker and type 9999 into the display and press enter.

Press start on the crosslinker as you start the timer.

Measure the length of time (the crosslinker will beep) to deliver 9999 μJ/cm<sup>2</sup>.

Repeat this measurement for a total of 3 times and enter the times in the table below.

Crosslinker: \_\_\_\_\_

Date	Calibration Time		Energy Rate Delivery (J/cm <sup>2</sup> /minute)	Conical Tubes 15 J/cm <sup>2</sup> Time	Micro Tubes 6 J/cm <sup>2</sup> Time	Microcons 4 J/cm <sup>2</sup> Time
	Minutes	Seconds				