Interference and diffraction lab

Single slit specs:

Speed: slow

Gain: 100(data is smoother)

Slit width (a): 0.04mm. repeated for 0.08 (aperture 3), and ~~0.02 (aperture 2)~~ retry with aperture 5

Aperture 4

Green light, wavelength λ: 515nm  
slit located (L) at 62+-0.2 cm

Laser at 100 cm (shouldnt matter

Sensor at 9.4 +-0.2 cm

Λ is wavelength, a is slit-width

theta=tan(x/h) s is shift position of sensor, h is the distance of the slit to the sensor.

Double slit:

Gain: 100

Aperture # 4

Slit separation 0.25

Slit width: 0.04

Laser at 90 cm

Slit located at (L) 60cm (+-1)

Sensor not moved.