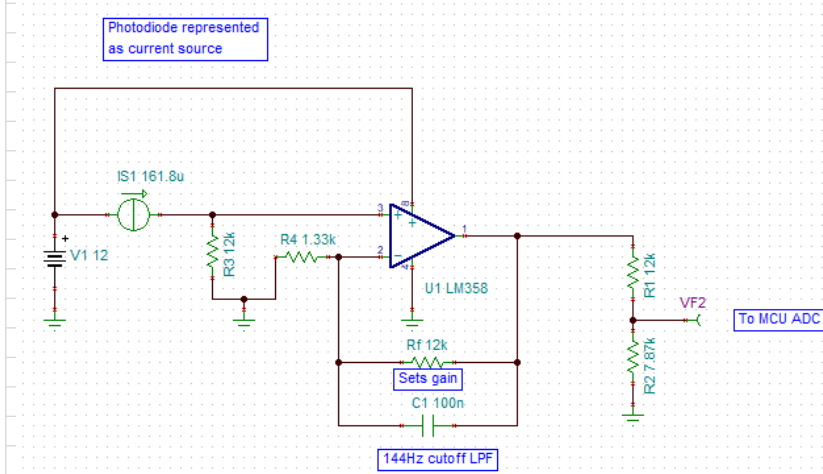
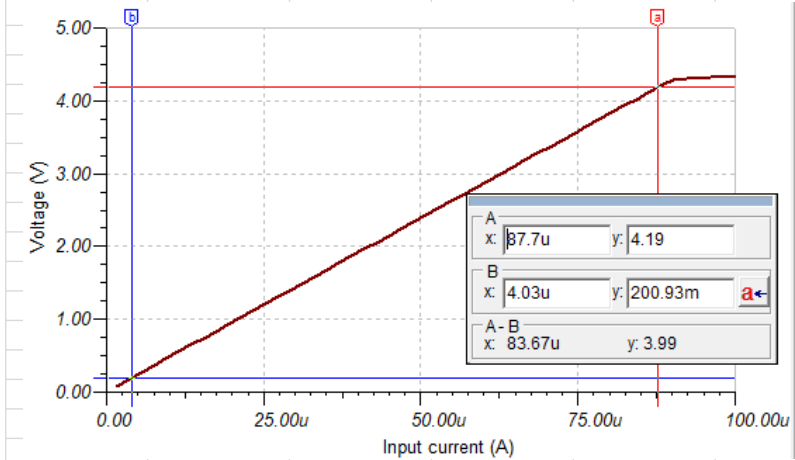


### Pin

Responsivity  
**0.2116**



The current was swept from 1 uA to 100 uA to simulate the full range of optical power anticipated  
The response of the OpAmp was plotted and the slope extracted

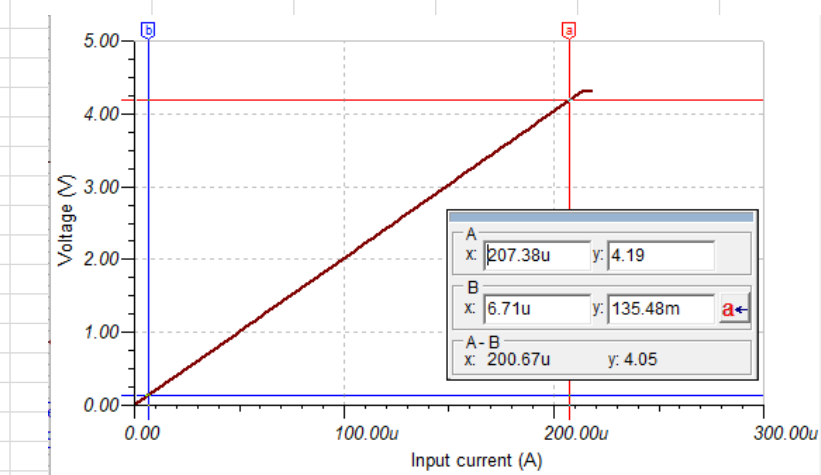
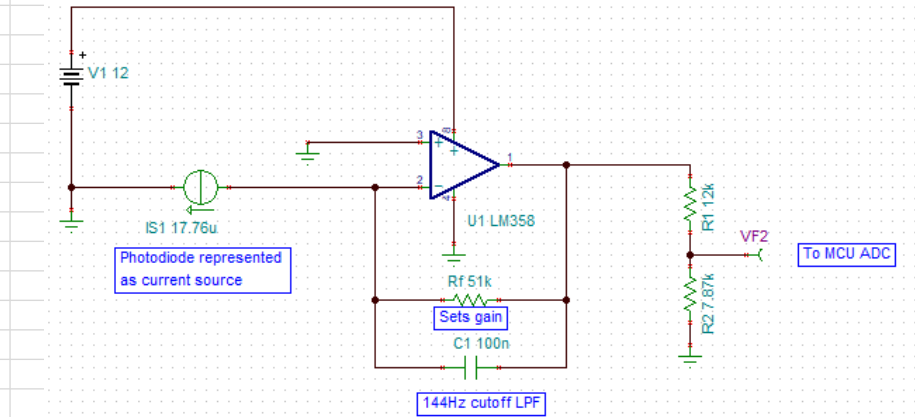


dy [mV]	3990
dx [mA]	0.08367
Slope	<b>47687.34313</b>

### Pout

The responsivity of the Pout Photodiode was assumed to be 0.9 based on the datasheet  
The slope of the OpAmp response was found by sweeping the PD current from 1 uA to 220 uA  
Responsivity

**0.9**



dy [mV]	4050
dx [mA]	0.20067
Slope	<b>20182.389</b>

#### FINAL EQs

$$Pinv = 10 * \log_{10}(1000 * Voltagein / (0.2116 * 47687.34313));$$

$$Poutv = 10 * \log_{10}(1000 * Voltageout / (0.9 * 20182.389));$$