Vcc

Vsensor

R1
{R1}

C1 **C2**
{C1} {C1}

Vcc **U1**

R6
{Rhp}

Vout

Vsensor

R5
{Rq2}

C3
{Chp}

Vpsoc

5

Vprojector

SINE(300m 200m 120)
AC 200m

Vlablights

SINE(0 100m 100)
AC 100m

R2
{R1}

R4
{Rq1}

;ac dec 10 1 100k

.tran 1s

R8 **R9**

Vcc

{Rvdu} {Rvdl}

.param Rhp=820 Chp=100n
.param Rq1=10k Rq2=10k

.param Rvdu=330k Rvdl=39k
.param R1=100k C1=12n

.param Rhp=1k Chp=79.58n
.param R1=100k C1=13.3n
.param Rvdu=90k Rvdl=10k

This acts as a DC offset.
Remember that it has a gain set by the Q [(Rq1+Rq2)/Rq1].

With a Q of 2 (10k,10k) to get 1 V offset at output we require a voltage of 0.5V