

$R_1$	$R_2$	$R_3$	$R_4$	$R_L$
$47.5 \Omega$	$46.1 \Omega$	$98 \Omega$	$217.2 \Omega$	$98.7 \Omega$

$V_s$   
 $4.996 \text{ V}$

$I_L$   
 $10 \text{ mili Amps}$

$V_{xy}$   
 $.956 \text{ V}$

$V_L$   
 $.954 \text{ V}$

$V_{oc}$   
 $1.36 \text{ V}$

$I_{sc}$   
 $28.5 \text{ mili Amps}$

$$V_{th} = V_{oc} = 1.36 \text{ V}$$

$$R_{th} = R_2 // (R_1 + R_3 // R_4) = 32.9 \Omega$$

$$I_L = \frac{V_{th}}{R_{th} + R_L} = 10.2 \text{ mA}$$

Simulated :

$$I_{Lsim} = 10.861 \text{ mA}$$

$$\text{Error} = \frac{|I_{Lsim} - I_L|}{I_L} = 6.48 \%$$

$$I_L \times R_L = .987 \text{ V}$$