

## Recommended Operating Conditions

Parameter	Symbol	Min.	Max.	Units	Conditions
Operating Temperature	T <sub>A</sub>	-40	85	°C	
Storage Temperature	T <sub>S</sub>	-40	85	°C	
Supply Voltage	V <sub>CC</sub>	2.4	5.5	V	

## Electrical & Optical Specifications (T<sub>a</sub>=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Photo Current (I)	I <sub>PH1</sub>	28	40	52	uA	V <sub>CC</sub> = 3V, Lux = 100 <sup>[1]</sup>
Photo Current (II)	I <sub>PH2</sub>	-	44	-	uA	V <sub>CC</sub> = 3V, Lux = 100 <sup>[2]</sup>
Dark Current	I <sub>DARK</sub>	-	300	-	nA	V <sub>CC</sub> = 3V, Lux = 0
Light Current Ratio	I <sub>PH2</sub> / I <sub>PH1</sub>	-	1.1	-	-	
Rise Time	T <sub>r</sub>	-	5	-	ms	R <sub>l</sub> = 1Kohm, Lux = 100
Fall Time	T <sub>f</sub>	-	5	-	ms	R <sub>l</sub> = 1Kohm, Lux=100
Peak sensitivity wavelength	λ	-	500	-	nm	
Settling Time pulsed at V <sub>CC</sub>	T <sub>set</sub>	-	10	-	ms	V <sub>CC</sub> pulsed = 0V to 3V; R <sub>load</sub> = 2.4K ohms; Lux = 100 <sup>[1]</sup>
Propagation delay	T <sub>d</sub>	-	5	-	ms	R <sub>l</sub> = 1Kohm, Lux = 100
Storage delay	T <sub>s</sub>	-	5	-	ms	R <sub>l</sub> = 1Kohm, Lux=100

Note :

1. Fluorescence light is used as light source, however, white LED is substituted in a mass production process
2. Illuminance by CIE standard light source (Incandescent lamp)

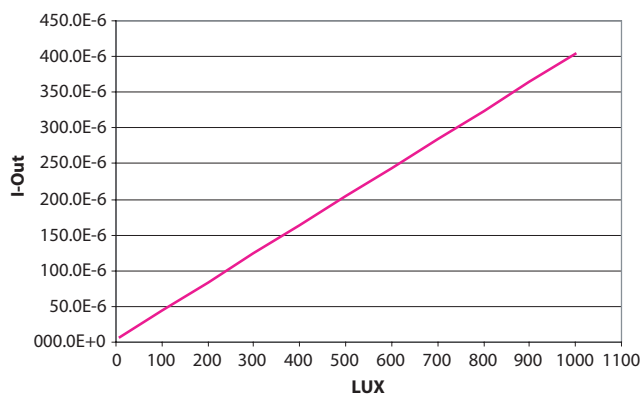


Figure 3. Average I-out Vs Lux (V<sub>CC</sub> = 3V, T=25°C, White LED source)

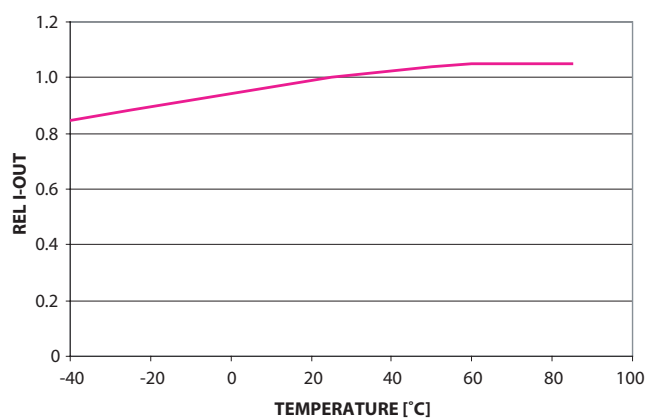


Figure 4. Average relative I-out Vs Temp (V<sub>CC</sub> = 3V, T=25°C, 320 Lux)

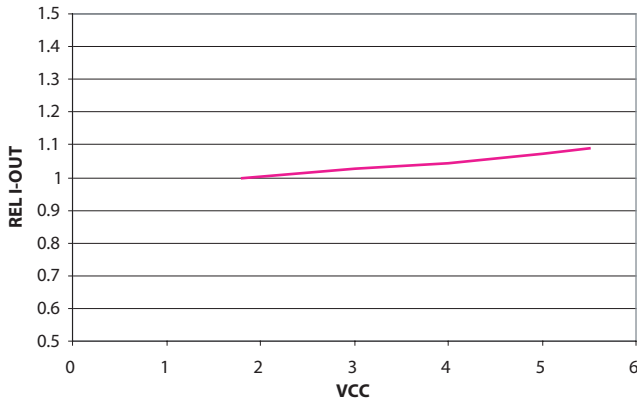


Figure 5. Relative Output Current Vs Vcc (Ta = 25°C, 100Lux)

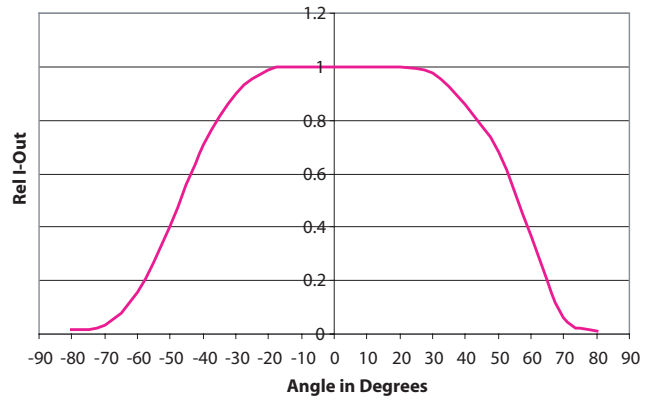


Figure 6. Relative Iout Vs Angle (Vcc = 3V, Ta = 25°C)

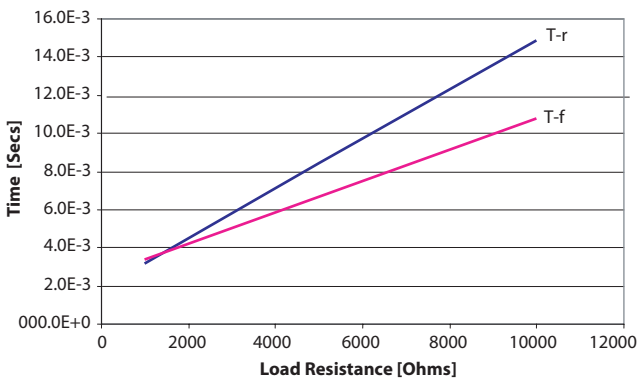


Figure 8. Average Rise Time, Fall Time Vs Load Resistance at Vcc = 3V

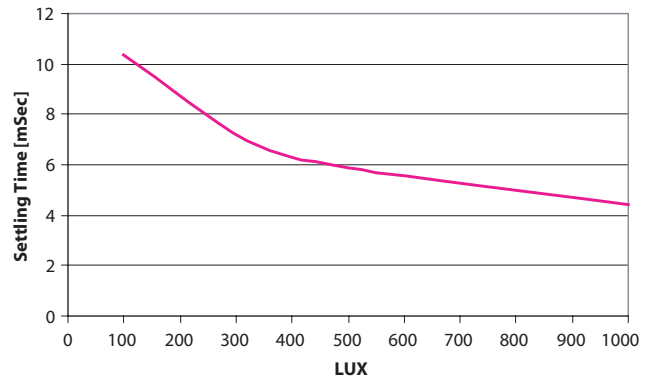


Figure 9. Average Settling Time vs Lux at Vcc=3V

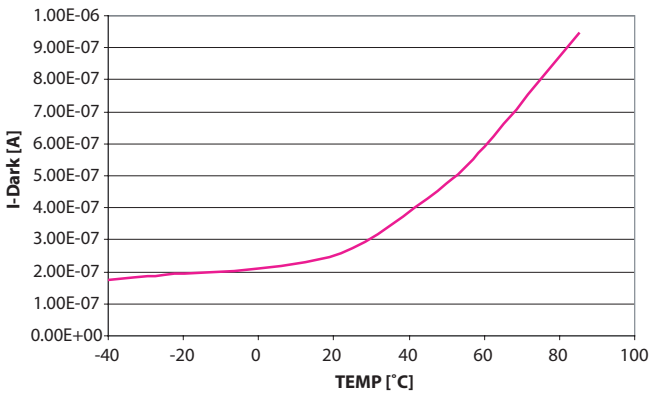


Figure 10. Dark current Vs temperature

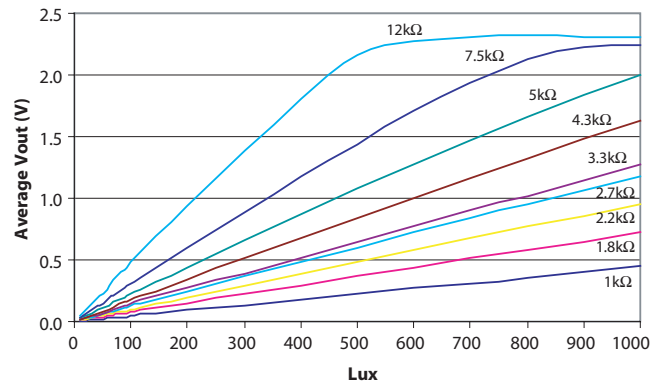


Figure 11. General Luminance vs Typical Output Voltage (Vcc = 3V, T = 25°C, Light Source = White LED)