

Recommended Operating Conditions

Parameter	Symbol	Min.	Max.	Units	Conditions
Operating Temperature	T _A	-40	85	°C	
Storage Temperature	T _S	-40	85	°C	
Supply Voltage	V _{CC}	2.4	5.5	V	

Electrical & Optical Specifications (T_a=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Photo Current (I)	I _{PH1}	28	40	52	uA	V _{CC} = 3V, Lux = 100 ^[1]
Photo Current (II)	I _{PH2}	-	44	-	uA	V _{CC} = 3V, Lux = 100 ^[2]
Dark Current	I _{DARK}	-	300	-	nA	V _{CC} = 3V, Lux = 0
Light Current Ratio	I _{PH2} / I _{PH1}	-	1.1	-	-	
Rise Time	T _r	-	5	-	ms	R _L = 1Kohm, Lux = 100
Fall Time	T _f	-	5	-	ms	R _L = 1Kohm, Lux = 100
Peak sensitivity wavelength	λ	-	500	-	nm	
Settling Time pulsed at V _{CC}	T _{set}	-	10	-	ms	V _{CC} pulsed = 0V to 3V; R _{load} = 2.4K ohms; Lux = 100 ^[1]
Propagation delay	T _d	-	5	-	ms	R _L = 1Kohm, Lux = 100
Storage delay	T _s	-	5	-	ms	R _L = 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)

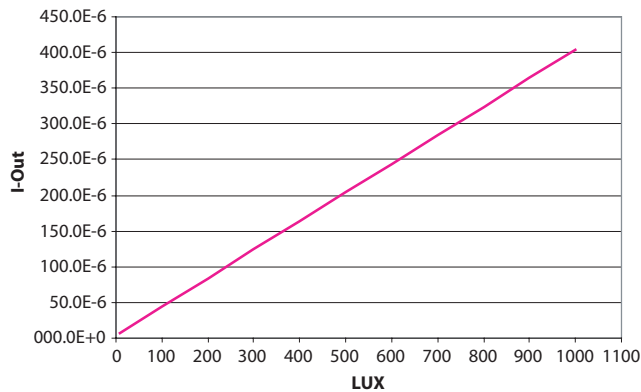


Figure 3. Average I-out Vs Lux (V_{CC} = 3V, T=25°C, White LED source)

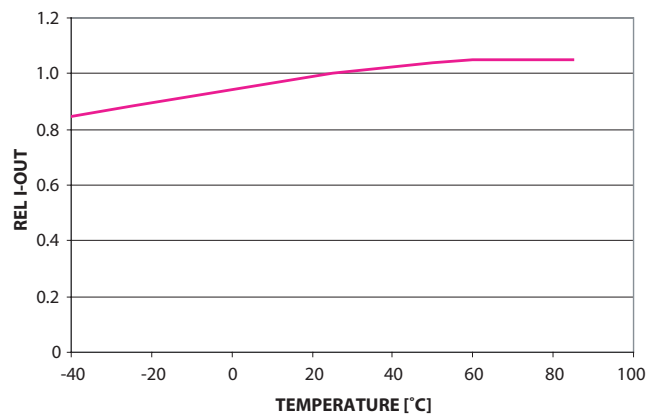


Figure 4. Average relative I-out Vs Temp (V_{CC} = 3V, T=25°C, 320 Lux)

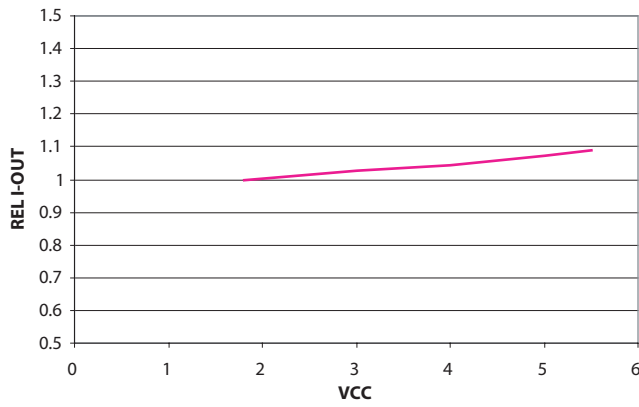


Figure 5. Relative Output Current Vs Vcc (Ta = 25°C, 100Lux)

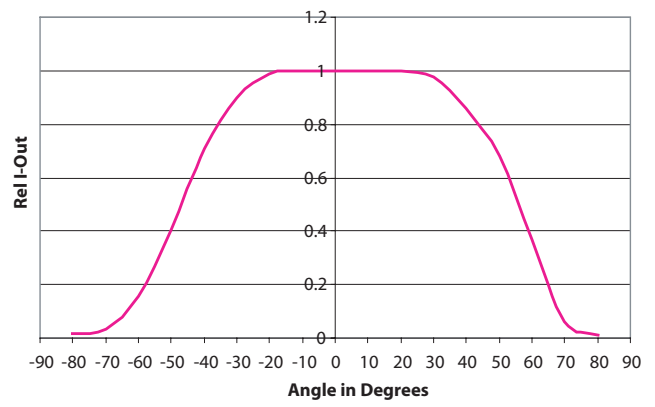


Figure 6. Relative Iout Vs Angle (Vcc = 3V, Ta = 25°C)

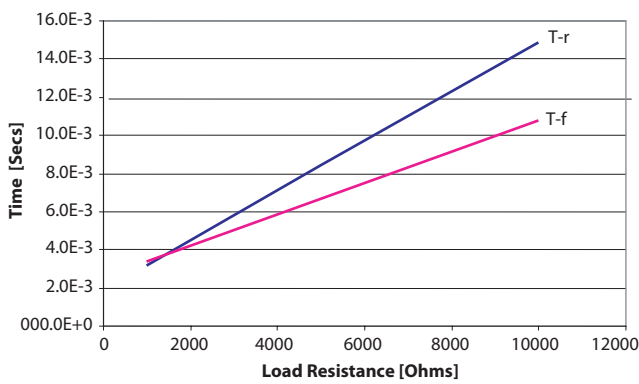


Figure 8. Average Rise Time, Fall Time Vs Load Resistance at Vcc = 3V

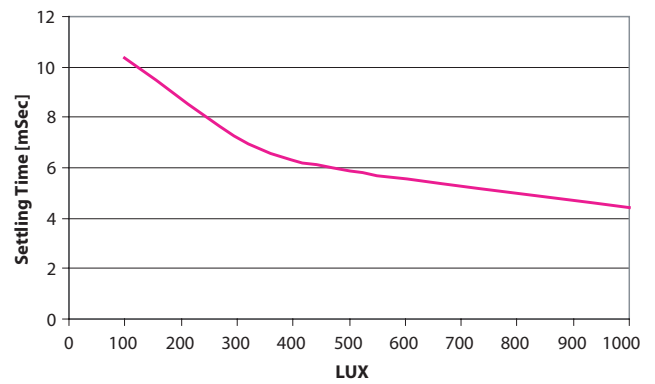


Figure 9. Average Settling Time vs Lux at Vcc=3V

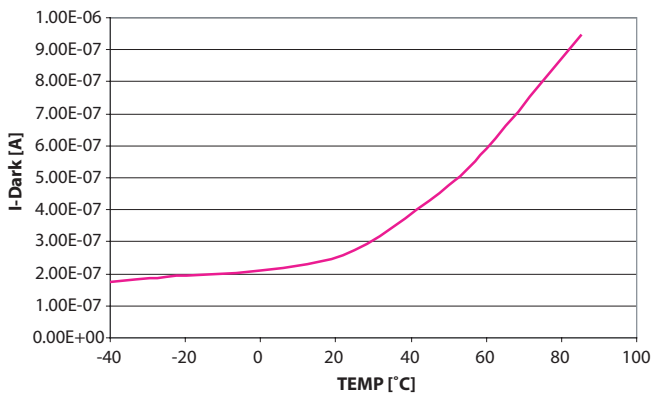


Figure 10. Dark current Vs temperature

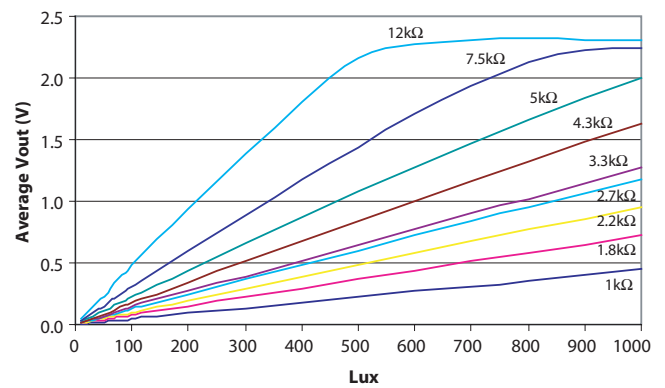


Figure 11. General Luminance vs Typical Output Voltage (Vcc = 3V, T = 25°C, Light Source = White LED)