

一、 Purpose :MTTF(Mean time to failure) Report

二、

三、 Test Condition:

(A) If =20mA Ta=25°C

According to Reliability experiment, the radiant intensity decay rate is 8.6%
after 1000hr test. So the radiant intensity lowers to original 91.4%.

Calculate method as follow:

MTTF Calculate method	$P = e^{-t/\theta}$	$0.914 = e^{-1000/\theta}$
	$\ln p = \ln e^{-t/\theta}$ $= -t/\theta \ln e$ $\theta = -t/\ln p$ ※ $\theta = \text{MTTF}$	$\ln 0.914 = \ln e^{-1000/\theta}$ $= -1000/\theta \ln e$ $\theta = -1000/\ln 0.914$ $\theta = -1000/-0.08992$ ※ $\theta = 11121(\text{hrs})$