



# TM-21 Report

Item# 83384



**Table 1: Report at each LM-80 Test Condition**

Description of LED Light Source Tested (manufacturer, model, catalog number)		CREE,Xlapm XB-D					
Test Condition 1 - 55°C Case Temp		Test Condition 2 - 85°C Case Temp					
Sample size	24	Sample size	24	Sample size	-		
Number of failures	0	Number of failures	0	Number of failures	-		
DUT drive current used in the test (mA)	700	DUT drive current used in the test (mA)	700	DUT drive current used in the test (mA)	-		
Test duration (hours)	6,000	Test duration (hours)	6,000	Test duration (hours)	-		
Test duration used for projection (hour to hour)	1,008 - 6,048	Test duration used for projection (hour to hour)	1,008 - 6,048	Test duration used for projection (hour to hour)	-		
Tested case temperature (°C)	55	Tested case temperature (°C)	85	Tested case temperature (°C)	-		
$\alpha$	3.487E-06	$\alpha$	6.230E-06	$\alpha$	-		
B	0.995	B	0.991	B	-		
Calculated L70(6k) (hours)	101,000	Calculated L70(6k) (hours)	56,000	Calculated L70(6k) (hours)	-		
Reported L70(6k) (hours)	>36000	Reported L70(6k) (hours)	>36000	Reported L70(6k) (hours)	-		

**Table 2: Interpolation Report  
(projection based on *in-situ* temperature entered)**

$T_{s,1}$ (°C)	55.00
$T_{s,1}$ (K)	328.15
$\alpha_1$	3.487E-06
$B_1$	0.995
$T_{s,2}$ (°C)	-
$T_{s,2}$ (K)	-
$\alpha_2$	-
$B_2$	-
$E_a/k_b$	-
A	-
$B_0$	0.995
$T_{s,i}$ (°C)	50.20
$T_{s,i}$ (K)	323.35
$\alpha_i$	3.487E-06
Projected L70(6k) at 50.2°C (hours)	101,000
Reported L70(6k) at 50.2°C (hours)	>36000