

Part No	Sample size	Number of failures	IF(mA)	Tset duration (H)	Test duration for projection	Tc(C)	α	B	Calculated L70 (6k)	Reported L70 (6k)
CLL042 series	20	0	2160	6000	from 1000H to 6000H	105	3.366E-06	0.981	100,000	> 36000
	20	0	2160	6000	from 1000H to 6000H	85	1.972E-06	0.989	175,000	> 36000
	20	0	2160	6000	from 1000H to 6000H	55	2.888E-06	0.998	123,000	> 36000

The report is applied to the following series
CLL012-0305 , CLL022-1202 , CLL022-1203 , CLL022-1204 ,
CLL032-1205 , CLL032-1206 , CLL032-1208 , CLL032-1212 ,
CLL042-1218 , CLL042-1818 .

If Tc is 105 deg C or less, the "Reported L70 (6kH) is >36000H.



TM-21 Report

Table 1: Report at each LM-80 Test Condition

Description of LED Light Source Tested (manufacturer, model, catalog number)		CLL042 series					
Test Condition 1 - 105°C Case Temp		Test Condition 2 - 85°C Case Temp		Test Condition 3 - 55°C Case Temp			
Sample size	20	Sample size	20	Sample size	20		
Number of failures	0	Number of failures	0	Number of failures	0		
DUT drive current used in the test (mA)	2160	DUT drive current used in the test (mA)	2160	DUT drive current used in the test (mA)	2160		
Test duration (hours)	6,000	Test duration (hours)	6,000	Test duration (hours)	6,000		
Test duration used for projection (hour to hour)	1,000 - 6,000	Test duration used for projection (hour to hour)	1,000 - 6,000	Test duration used for projection (hour to hour)	1,000 - 6,000		
Tested case temperature (°C)	105	Tested case temperature (°C)	85	Tested case temperature (°C)	55		
α	3.366E-06	α	1.972E-06	α	2.888E-06		
B	0.981	B	0.989	B	0.998		
Calculated L70(6k) (hours)	100,000	Calculated L70(6k) (hours)	175,000	Calculated L70(6k) (hours)	123,000		
Reported L70(6k) (hours)	>36000	Reported L70(6k) (hours)	>36000	Reported L70(6k) (hours)	>36000		

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

$T_{s,1}$ (°C)	105.00
$T_{s,1}$ (K)	378.15
α_1	3.366E-06
B_1	0.981
$T_{s,2}$ (°C)	-
$T_{s,2}$ (K)	-
α_2	-
B_2	-
E_a/k_b	-
A	-
B_0	0.981
$T_{s,i}$ (°C)	105.00
$T_{s,i}$ (K)	378.15
α_i	3.366E-06
Projected L70(6k) at 105°C (hours)	100,000
Reported L70(6k) at 105°C (hours)	>36000

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CLL032-1205 , CLL032-1206 , CLL032-1208 , CLL032-1212 ,
CLL042-1218 , CLL042-1818 .