



TM-21 Report

Table 1: Report at each LM-80 Test Condition

Description of LED Light Source Tested (manufacturer, model, catalog number)		Airey-Thompson, 82LH40K48 Samsung Electronics Co., LTD. SPMWH1228xxxxxxxx					
Test Condition 1 - 55°C Case Temp		Test Condition 2 - 85°C Case Temp		Test Condition 3 - 105°C Case Temp			
Sample size	25	Sample size	25	Sample size	25		
Number of failures	0	Number of failures	0	Number of failures	0		
DUT drive current used in the test (mA)	120	DUT drive current used in the test (mA)	120	DUT drive current used in the test (mA)	120		
Test duration (hours)	9,000	Test duration (hours)	9,000	Test duration (hours)	9,000		
Test duration used for projection (hour to hour)	4,000 - 9,000	Test duration used for projection (hour to hour)	4,000 - 9,000	Test duration used for projection (hour to hour)	4,000 - 9,000		
Tested case temperature (°C)	55	Tested case temperature (°C)	85	Tested case temperature (°C)	105		
α	1.506E-06	α	2.237E-06	α	2.468E-06		
B	1.002	B	1.002	B	0.999		
Reported L70(9k) (hours)	>54000	Reported L70(9k) (hours)	>54000	Reported L70(9k) (hours)	>54000		

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

$T_{s,1}$ (°C)	55.00
$T_{s,1}$ (K)	328.15
α_1	1.506E-06
B_1	1.002
$T_{s,2}$ (°C)	-
$T_{s,2}$ (K)	-
α_2	-
B_2	-
E_a/k_b	-
A	-
B_0	1.002
$T_{s,i}$ (°C)	45.50
$T_{s,i}$ (K)	318.65
α_i	1.506E-06
Reported L70(9k) at 45.5°C (hours)	>54000

Report Generated By: Kunjan Modi	Notes: Reference In-Situ test report: L102214102
Company: Light Laboratory, Inc.	
Date: 11/10	