



# TM-21 Report

| Table 1: Report at each LM-80 Test Condition                                       |                                    |   |               |
|--|------------------------------------|---|---------------|
| Description of LED Light Source Tested<br>(manufacturer, model,<br>catalog number) | Seoul Semiconductor Co., LTD<br>XX |   | STWxA2SD-     |
|  | Test Condition 1 - 85°C Case Temp  | Test Condition 2 - 105°C Case Temp                  |               |
| Sample size  | 20                                 | Sample size   | 20            |
| Number of failures   | -                                  | Number of failures                                  | -             |
| DUT drive current used in<br>the test (mA)   | 300                                | DUT drive current used in<br>the test (mA)          | 300           |
| Test duration (hours)  | 6,000                              | Test duration (hours)                               | 6,000         |
| Test duration used for<br>projection (hour to hour)                                | 1,000 - 6,000                      | Test duration used for<br>projection (hour to hour) | 1,000 - 6,000 |
| Tested case temperature<br>(°C)  | 85                                 | Tested case temperature<br>(°C)                     | 105           |
| $\alpha$   | 2.991E-06                          | $\alpha$  | 6.415E-06     |
| B  | 1.009                              | B   | 0.996         |
| Reported L70(6k) (hours)   | >36000                             | Reported L70(6k) (hours)                            | >36000        |

| Table 2: Interpolation Report<br>(projection based on <i>in-situ</i> temperature entered) |           |
|---|-----------|
| $T_{s,1}$ (°C)  | 85.00     |
| $T_{s,1}$ (K)   | 358.15    |
| $\alpha_1$  | 2.991E-06 |
| $B_1$   | 1.009     |
| $T_{s,2}$ (°C)  | -         |
| $T_{s,2}$ (K)   | -         |
| $\alpha_2$  | -         |
| $B_2$   | -         |
| $E_a/k_b$   | -         |
| A   | -         |
| $B_0$   | 1.009     |
| $T_{s,i}$ (°C)  | 50.00     |
| $T_{s,i}$ (K)   | 323.15    |
| $\alpha_i$  | 2.991E-06 |
| Reported L70(6k) at<br>50°C (hours)   | >36000    |

