



TM-21 Report

Table 1: Report at each LM-80 Test Condition

| | | | | | |
|---|----------------|--|----------------|---|---|
| Description of LED Light Source Tested (manufacturer, model, catalog number) | | Seoul Semiconductor Co., LTD S1W0-5050507006-00000000-00002 | | | |
| Test Condition 1 - 85° C Case | | Test Condition 2 - 105° C Case | | | |
| Sample size | 20 | Sample size | 20 | Sample size | - |
| Number of failures | 0 | Number of failures | 0 | Number of failures | - |
| DUT drive current used in the test (mA) | 500 | DUT drive current used in the test (mA) | 500 | DUT drive current used in the test (mA) | - |
| Test duration (hours) | 18,000 | Test duration (hours) | 18,000 | Test duration (hours) | - |
| Test duration used for projection (hour to) | 9,000 - 18,000 | Test duration used for projection (hour to) | 9,000 - 18,000 | Test duration used for projection (hour to) | - |
| Tested case temperature (° C) | 85 | Tested case temperature (° C) | 105 | Tested case temperature (° C) | - |
| α | 5.907E-07 | α | 7.713E-07 | α | - |
| B | 0.983 | B | 0.977 | B | - |
| Reported L90(18k) (hours) | >108000 | Reported L90(18k) (hours) | 106,000 | Reported L90(18k) (hours) | - |

Table 2: Interpolation Report

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|---|-----------|
| (projection based on <i>in-situ</i> temperature entered) | |
| $T_{s,1}$ (° C) | 85.00 |
| $T_{s,1}$ (K) | 358.15 |
| α_1 | 5.907E-07 |
| B_1 | 0.983 |
| $T_{s,2}$ (° C) | 105.00 |
| $T_{s,2}$ (K) | 378.15 |
| α_2 | 7.713E-07 |
| B_2 | 0.977 |
| E_a/k_b | 1.81E+03 |
| A | 9.155E-05 |
| B_0 | 0.980 |
| $T_{s,i}$ (° C) | 97.80 |
| $T_{s,i}$ (K) | 370.95 |
| α_i | 7.030E-07 |
| Reported L90(18k) at | >108000 |

| | |
|----------------------|--------|
| Report Generated By: | Notes: |
| Company: | |
| Date: | |