



**Reliability test report**

**LT P/N LT216WH-A-Q**

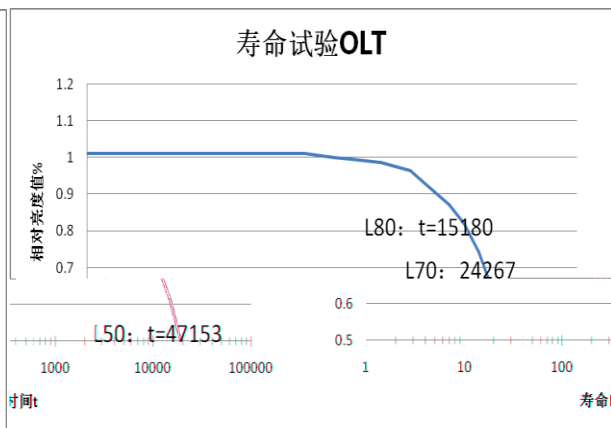
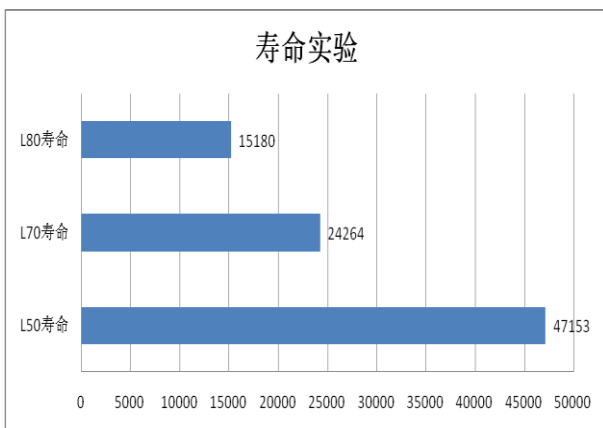
# SHEN ZHEN SHI L.T PHOTOELECTRICITY TECHNOLOGY CO., LTD

**1000H                      Iv**

| Test Item | Iv<br>Test time and brightness relation rate. |         |        |        |         | Fail No. | Conclusion | Remark                                     |
|-----------|---|---------|--------|--------|---------|----------|------------|--|
|           | 0hr   | 168hrs  | 336hrs | 500hrs | 1000hrs |          |            |  |
| (OLT)     | 100.000%                                      | 101.11% | 99.88% | 99.49% | 98.53%  | 0        | Pass       | (Test Condition) :<br>IF =20mA;<br>1000Hrs |

| Data Set ----25    20mA         |             |
|---------------------------------|-------------|
| Part Number:                    | LT216WH-A-Q |
| Number of Units:                | 20pcs       |
| Actual Case Temperature(TS):    | TS=25.9     |
| Actual Ambient Temperature(TA): | TA=25.2     |
| Life Test Drive Current         | IF=20mA     |

|             | L50   | L70   | L80   |
|-------------|-------|-------|-------|
| LT216WH-A-Q | 47153 | 24267 | 15180 |



# SHEN ZHEN SHI L.T PHOTOELECTRICITY TECHNOLOGY CO., LTD

LED 50% LED LED1000  
MTBF .

$$R(\%)=[e^{-}]$$

LED 1000  
2.7183  
50%/70%/80%

$$R(\%)=[e^{-}]$$

$$=[2.7183^{-(0.0147/1000\text{hrs}) t}]$$

$$=50\%/70\%/80\%$$

,

50% LED  
 $t = -$   
 $= -[ (\ln 50\%) / (0.0147 / 1000\text{hrs}) ]$   
 $= 47153\text{hrs}$

,

70% LED  
 $t = -[ (\ln 7$   
 $= -[ (\ln 70\%) / (0.0147 / 1000\text{hrs}) ]$   
 $= 24267\text{hrs}$

,

80% LED  
 $t = -[ (\ln 8$   
 $= -[ (\ln 80\%) / (0.0147 / 1000\text{hrs}) ]$   
 $= 15180\text{hrs}$