YL-T5050W-AA LM-80 Report

1、 Number of LED source.
8pcs per test.

2、 Description of LED source.
YL-T5050W-AA-01.

3、Description of Auxillary Equipment.
SMD Special aging equipment.

4、Operating Cycle.
DC driving.

5、Ambient Conditions.
25 ℃, 30% relative humidity, stagnant air.

6、 Case Temperature (Tc) .
Table-1 LM-80 Test condition

Tc（deg ℃）	Drive current（mA）	Relative humidity	Average Lumen Maintenance
55	60	19%	100%
70	60	15%	97%
85	60	9%	92%

7、 Drive Current.
60 mA.

8、 Initial Luminous flux and forward voltage.
Typ 23.5lm,Typ 3.2V.

9、 Lumen Maintenance DATA.
Refer to Tabl

Tc（deg ℃）	Chart
55	1-1
70	1-2
85	1-3

10、 Observation of LED failures.
No crack or abnormality was observed.

11、LED light source monitoring interval.
1000H.

12、 Photometric measurement uncertainty.
±2% lumens, ±0.002 (x,y).

13. Chromaticity shift.

Refer to Tabale-3 ,Chart-2-1,2-2,2-3 and Chart-3-1,3-2,3-3

Table-3 Chromaticity shift list

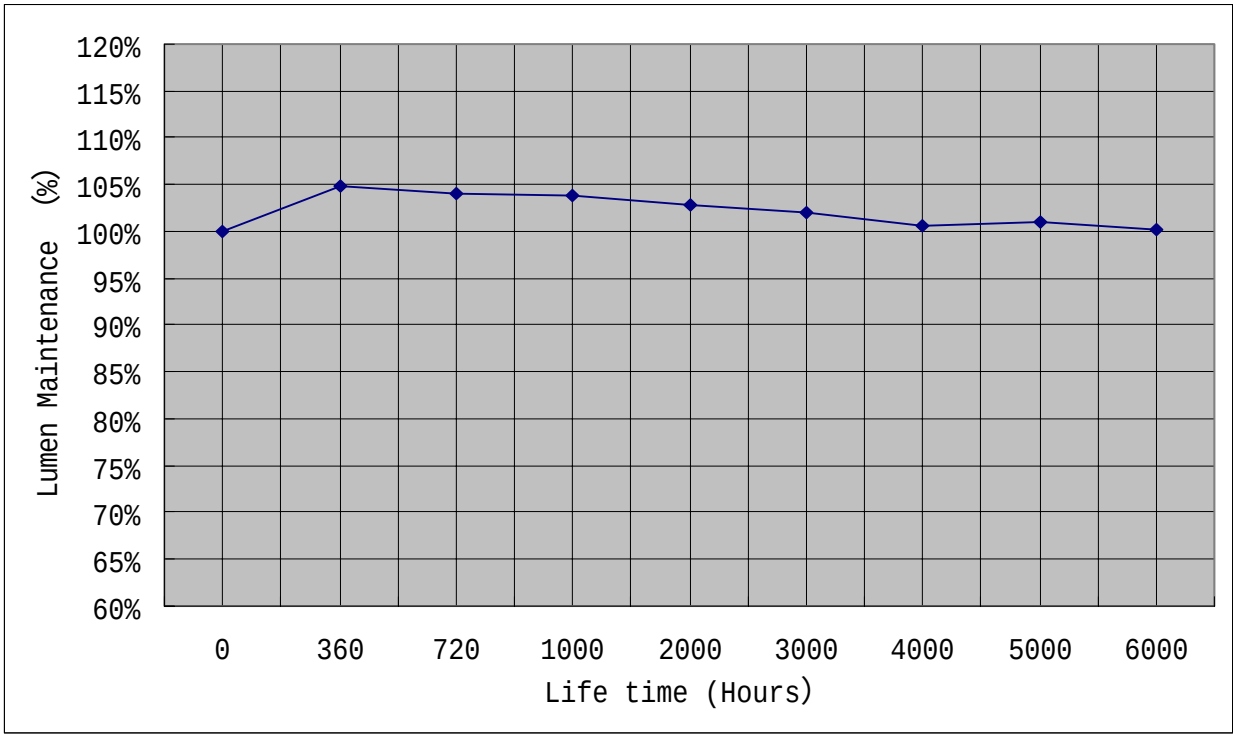
Tc（deg ℃）	Chart (x)	Chart (y)
85	2-3	2-3
70	2-2	2-2
55	2-1	2-1

Table-4 Lumen Maintenance-Life time

Environment Temperature	Lumen Maintenance	Life time(H)	0	1000	2000	3000	4000	5000	6000
Tc=85℃	Lumen Maintenance (%)	Max	100	104	100	99	97	96	93
		Avg	100	101	100	98	97	96	92
		Min	100	98	100	97	97	95	92
		Stdev	0.1586	0.5207	0.1221	0.2473	0.1551	0.1908	0.2059
Tc=70℃	Lumen Maintenance (%)	Max	100	103	102	102	100	99	97
		Avg	100	103	103	101	100	99	97
		Min	100	103	103	101	100	99	98
		Stdev	0.1307	0.1653	0.1122	0.2248	0.1357	0.1189	0.1198
Tc=55℃	Lumen Maintenance (%)	Max	100	104	103	102	101	103	102
		Avg	100	104	103	102	101	101	100
		Min	100	104	103	102	100	98	97
		Stdev	0.1063	0.1204	0.1329	0.1519	0.4738	0.5031	0.5508

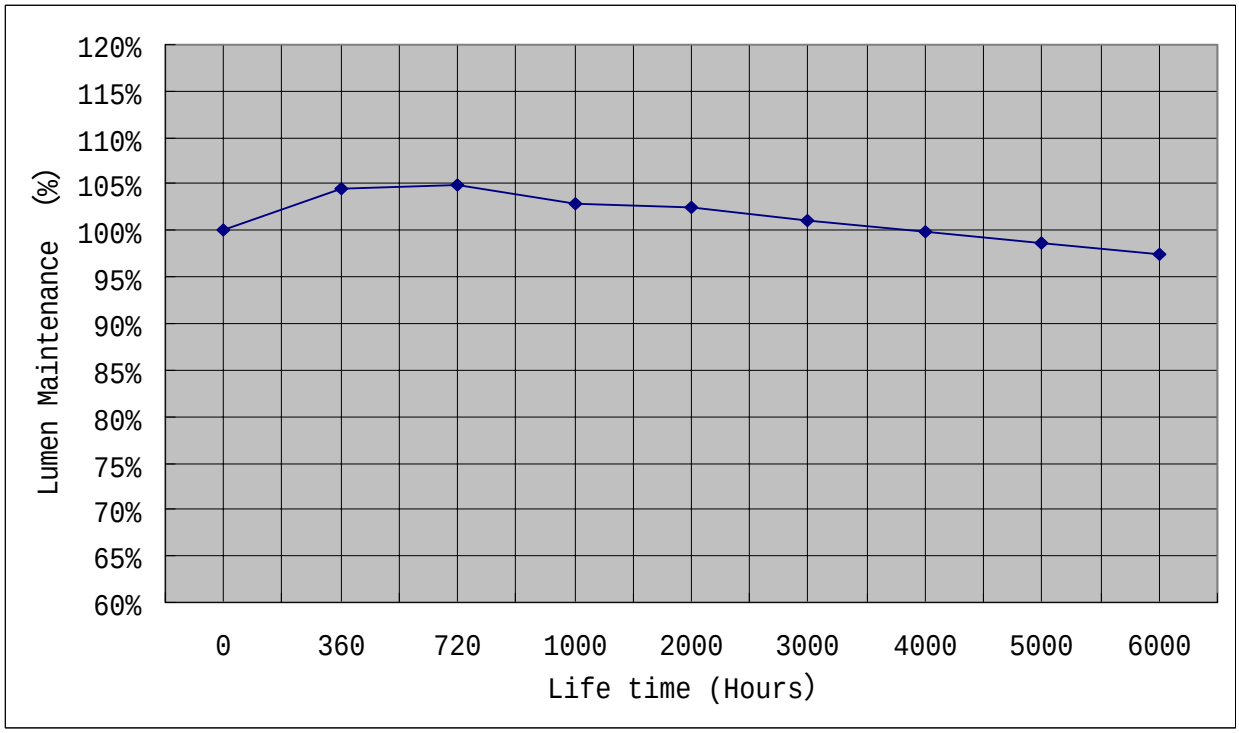
Chartl-1 Lumen Maintenance-Life time

Tc=55degC IF=60mA



Chartl-2 Lumen Maintenance-Life time

Tc=70degC IF=60mA



Chartl-3 Lumen Maintenance-Life time

Tc=85degC IF=60mA

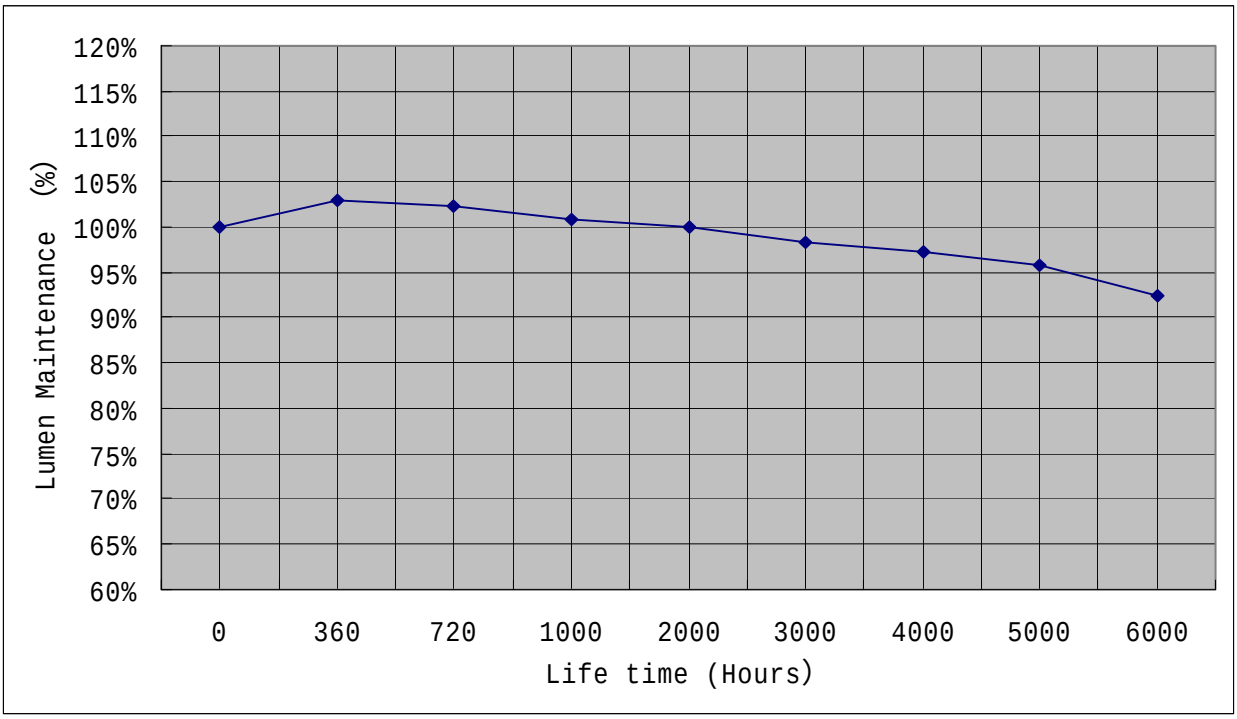


Chart2-1 Chromaticity shift

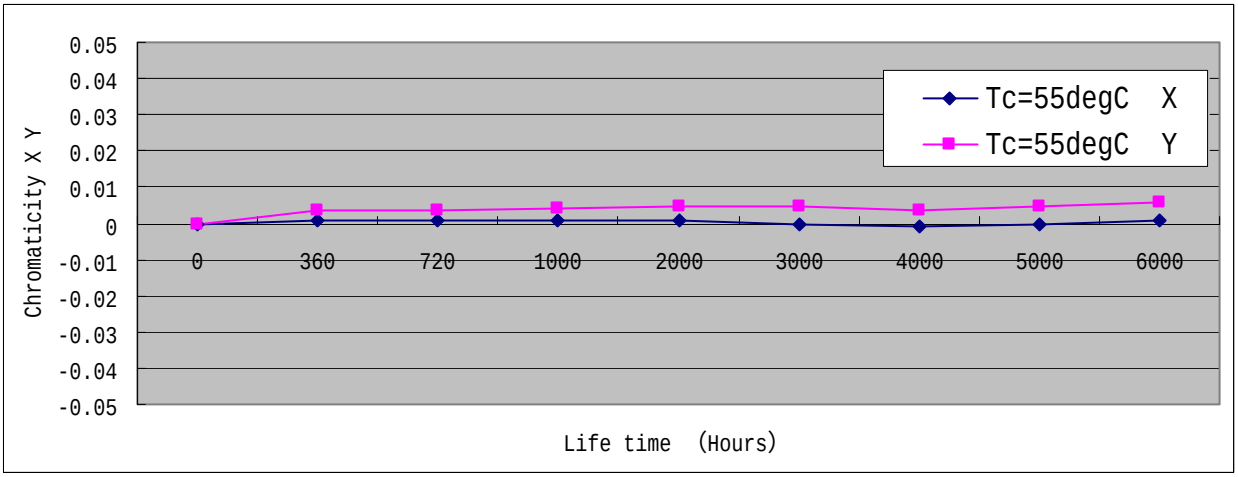


Chart2-2 Chromaticity shift

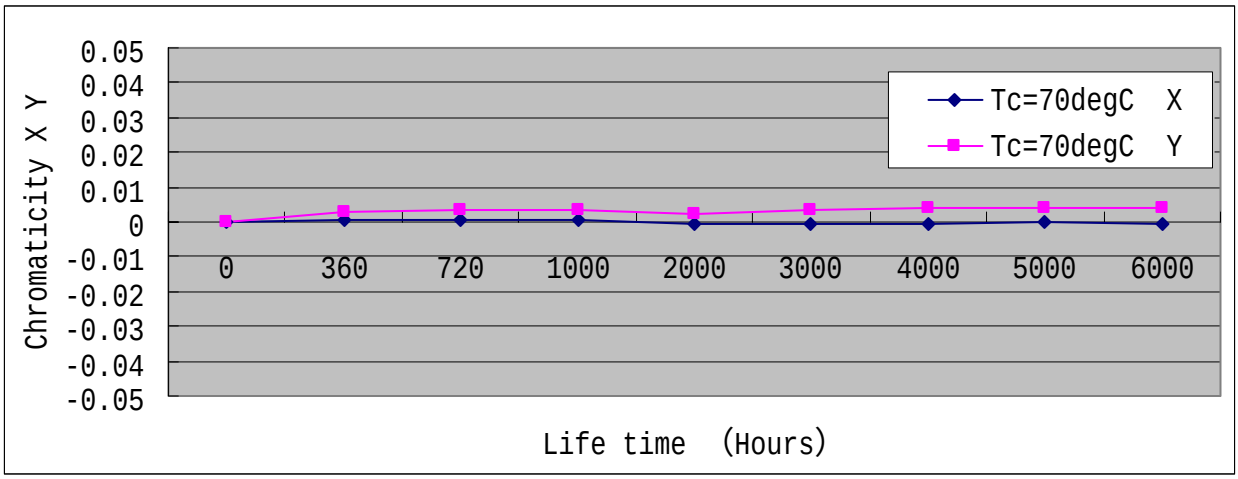
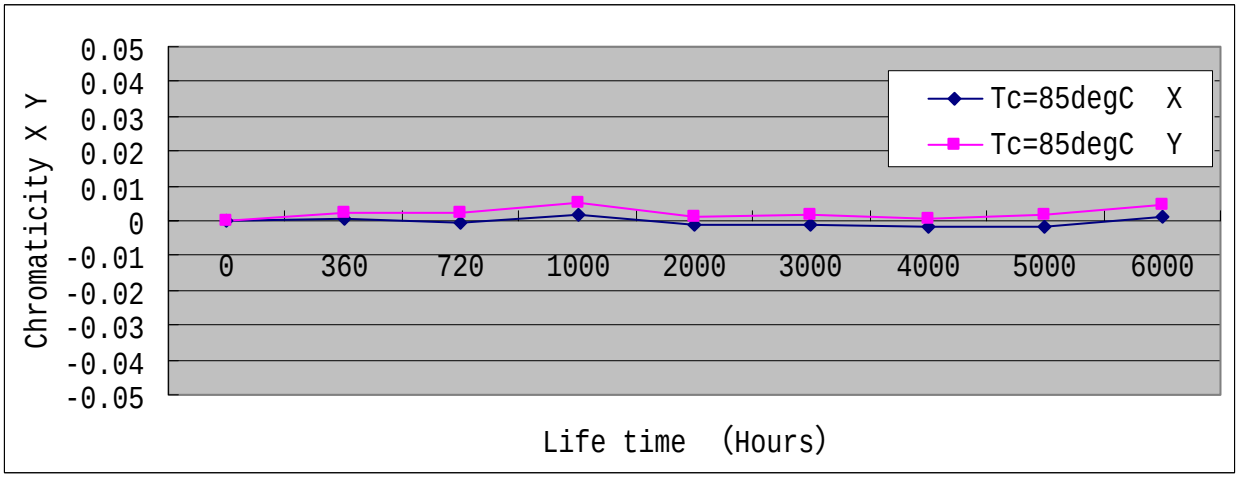


Chart2-3 Chromaticity shift



01, 12 , 2011