Note:

TABLE OF CONTENTS

1 - General Information

1.1 Description of LED Light Sources#

Sample Size:

50 PCS test samples were in good condition and received on 2022-01-19. The samples were numbered from 1 to 25 and 26 to 50.

Manufacturer:	Hongli Zhihui Group Co.,Ltd. Guangzhou Branch
Part Number:	HL-AM-2835H421W-S1-08HL-HR6
Part Type:	LED Package
Drive Level:	DC 150mA
Nominal CCT:	2700K
Power:	0.51 W
Average Current Density per LED die:	861.113 mA/mm^2
Average Power Density per LED die:	2.928W/mm^2
CRI:	95
Die Spacing:	/

Sampling Method

1.5 Ambient Conditions for Maintenance Test

For lumen maintenance test, samples within one data set, were installed on cooling boards in thermal chambers with minimal ambient airflow. The case temperature and ambient temperature was monitored by thermocouples which one was soldered to the $_{LED}$) location, while the other is mounted at a distance of 5 mm above the TMP location.

During life testing, TMP_{LED} of the coldest LEDs were maintained at a temperature that was greater than or equal to 2°C below the corresponding nominal case temperature. Surrounding air was maintained at a temperature that was greater than or equal to 5°C below the corresponding nominal case temperature. Thermocouples were shielded from direct DUT optical radiation and comply with
.

Samples were connected to DC power supply in series circuits with a constant current. The forward current was regulated to within ±3% of the specified value of the manufacturer.

The relative humidity within chamber was kept less than s-64(in)-62(s)-6(BDC BT1 7( )]TJEf1 07(a)4(r)5(d)6(Q)an s-81-5( )-62(s)-6(BD%)-5(h)4(a)4(n)4

1.0 0 1 118.-72372 (o)468 c6024 TJ ET O T 1 0 0 1 170.18 638.02 T279.6 08.re lowture9 TJ ET4(c80 0 1 257.21 619.66 T19 0 5( )-109(g)4(r:14 8.04 Tf 1 0 0 1 118.-723

3 - Test Data

3.1 Data Set 1, 55°C, 150mA (Lumen Maintenance)

No.		Lumen Maintenance (%)					
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	44.79	100.11	99.98	99.80	99.60	99.35	99.06
2	45.75	100.09	99.80	99.78	99.58	99.41	99.23
3	45.52	100.04	99.89	99.54	99.38	99.19	98.90
4	45.24	100.15	99.93	99.82	99.56	99.23	98.96
5	45.85	100.07	99.78	99.63	99.35	99.08	98.87
6	45.42	99.98	99.76	99.27	99.10	98.88	98.63
7	45.15	100.11	99.80	99.27	99.07	98.80	98.58
8	46.01	99.93	99.83	99.74	99.48	99.22	99.09
9	45.32	100.09	99.69	99.40			

3.2 Data Set 1, 55°C, 150mA (Forward Voltage)

No.	Forward Voltage (V)						
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	3.147	3.122	3.117	3.124	3.142	3.142	3.128
2	3.172						

3.3 Data Set 1, 55°C, 150mA (Chromaticity Shift)

No.			CCT(K)						
	0hr(Initial)			1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	0.2624	0.5280	2700	0.0002	0.0005	0.0005	0.0007	0.0009	0.0011
2	0.2607	0.5286	2733	0.0003	0.0004	0.0006	0.0007	0.0011	0.0012
3	0.2619	0.5285	2707	0.0001	0.0003	0.0007	0.0009	0.0011	0.0013
4	0.2599	0.5259	2761	0.0003	0.0003	0.0008	0.0010	0.0011	0.0013
5	0.2606	0.5262	2745	0.0002	0.0005	0.0006	0.0007	0.0008	0.0009
6	0.2598	0.5257	2764	0.0001	0.0002	0.0005	0.0005	0.0008	0.0010
7	0.2602	0.5260	2754	0.0002	0.0004	0.0008	0.0010		

3.4

3.5 Data Set 2, 105°C, 150mA (Forward Voltage)

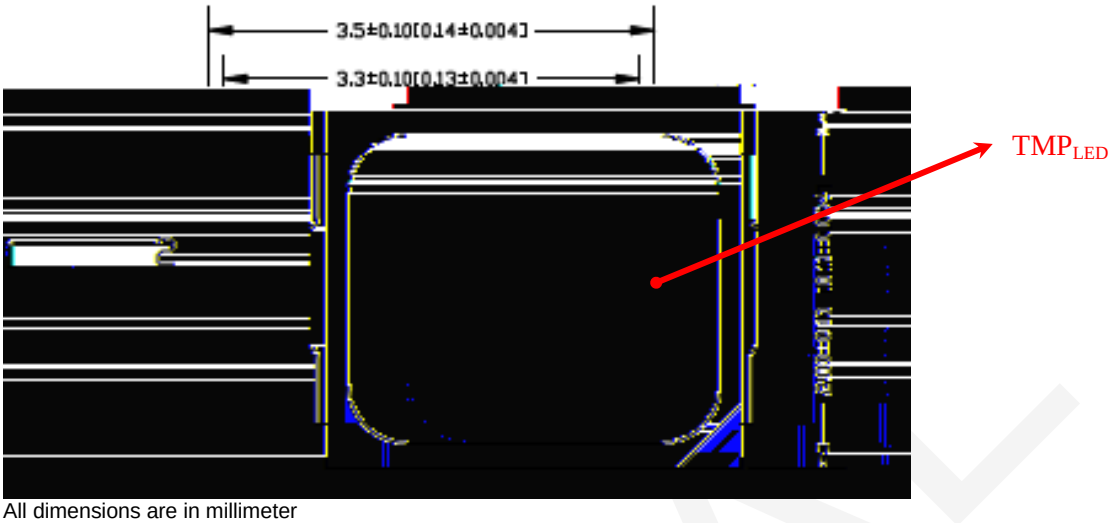
No.	Forward Voltage (V)						
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
26	3.143	3.134	3.142	3.137	3.163	3.150	3.140
27	3.147	3.136	3.132	3.128	3.143	3.164	3.131
28	3.147	3.130	3.150	3.140	3.127	3.126	3.132
29	3.153	3.136	3.158	3.150	3.158	3.152	3.145
30	3.172	3.134	3.130	3.122	3.138	3.147	3.134
31	3.149	3.136	3.143	3.135	3.130	3.133	3.135
32	3.143	3.134	3.138	3.117	3.141	3.143	3.130
33	3.149	3.141	3.138	3.136	3.137	3.140	3.138
34	3.151	3.134	3.125	3.117	3.148	3.127	3.142
35	3.124	3.118	3.110	3.119	3.130	3.124	3.122
36	3.157	3.128	3.130	3.137	3.135	3.130	3.135
37	3.130	3.126	3.129	3.127	3.157	3.143	3.160
38	3.136	3.132	3.133	3.130	3.140	3.148	3.136
39	3.136	3.130	3.132	3.132	3.155	3.127	3.134
40	3.139	3.136	3.146	3.146	3.139	3.152	3.143
41	3.143	3.139	3.136	3.128	3.142	3.149	3.150
42	3.153	3.147	3.146	3.146	3.125	3.154	3.142
43	3.141	3.130	3.134	3.156	3.155	3.137	3.150
44	3.124	3.122	3.127	3.128	3.148	3.129	3.127
45	3.132	3.128	3.131	3.127	3.143	3.132	3.127
46	3.145	3.136	3.135	3.133	3.130	3.126	3.140
47	3.132	3.122	3.127	3.126	3.143	3.131	3.141
48	3.153	3.143	3.135	3.136	3.145	3.149	3.148
49	3.145	3.143	3.149	3.150	3.131	3.133	3.145
50	3.147	3.145	3.149	3.147	3.143	3.132	3.136
Avg.	3.144	3.134	3.136	3.134	3.142	3.139	3.139
Med.	3.145	3.134	3.135	3.133	3.142	3.137	3.138
st dev	0.011	0.007	0.010	0.011	0.010	0.011	0.009
Min.	3.124	3.118	3.110	3.117	3.125	3.124	3.122
Max.	3.172	3.147	3.158	3.156	3.163	3.164	3.160

3.6 Data Set 2, 105°C, 150mA (Chromaticity Shift)

No.			CCT(K)						
	0hr(Initial)			1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
26	0.2622	0.5261	2712	0.0002	0.0003	0.0004	0.0005	0.0006	0.0008
27	0.2612	0.5299	2717	0.0004	0.0007	0.0005	0.0006	0.0009	0.0010
28	0.2619	0.5275	2711	0.0001	0.0005	0.0007	0.0009	0.0010	0.0012
29	0.2595	0.5267	2766	0.0004	0.0010	0.0010	0.0010	0.0008	0.0010
30	0.2604								

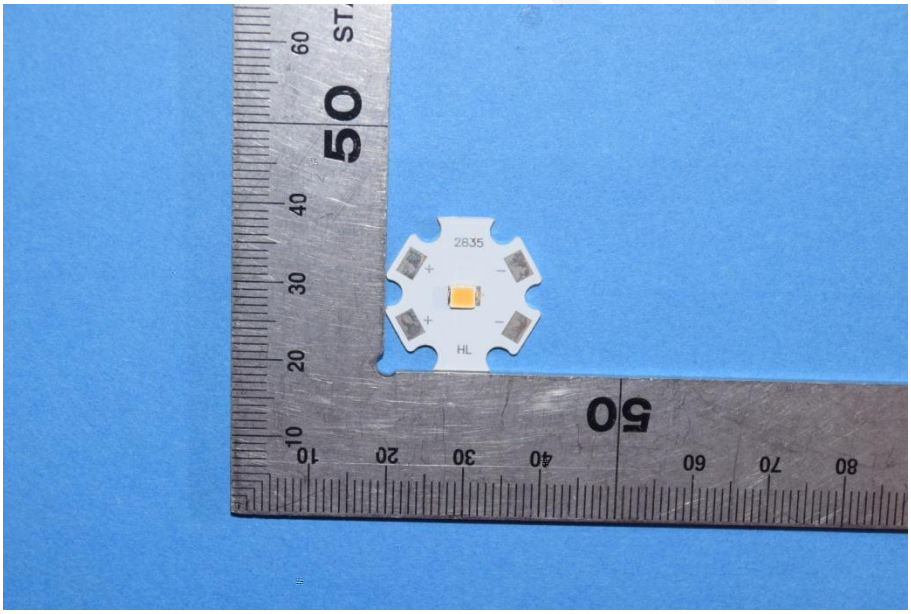
4 - DUT Photo

4.1 Mechanical Dimensions



All dimensions are in millimeter

4.2 DUT Photo



Directions

**********END OF REPORT**********