TEST REPORT

According to ANSI/IES LM-80-15
For

Hongli Zhihui Group Co.,Ltd. Guangzhou Branch

Room 316, Building 2, No.1, Xianke Yi Road, Huadong Town, Huadu District, Guangzhou, China

Model:
HL-AS-2835VDW-3C-S1-08-PCT-HR3(R9)

Report Type: 6000 Hours Test Report	**Product Type:** LED Package
Test Engineer:	Pote Wang
Report Number:	RSZ180319505-10
Test Date:	2018-03-28 to 2018-12-10
Report Date:	2018-12-19
Reviewed By:	Daniel Duan / EE Engineer
Test Facility:	Test facility was located at No.69,Pulongcun ,Puxinhu Industrial Area, Tangxia , Dongguan, Guangdong, China.
Prepared By:	Bay Area Compliance Laboratories Corp. (Dongguan). No.69,Pulongcun ,Puxinhu Industrial Area, Tangxia , Dongguan, Guangdong, China. Tel: +86-0769-86858888 Fax:+86-0769-86858588
Accreditation:	The IAS Accreditation Number TL-460.

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1 - General Information

1.1 Description of LED Light Sources

Sample Size:

50 PCS samples were received on 2018-03-19. The samples were numbered from 1 to 25 and 26 to 50.

Manufacturer:	Hongli Zhihui Group Co.,Ltd. Guangzhou Branch
Part Number:	HL-AS-2835VDW-3C-S1-08-PCT-HR3(R9)
Part Type:	LED Package
Drive Level:	DC 20mA
Nominal CCT:	2700K
Power:	1.1W
Average Current Density per LED die:	89.855mA/mm^2
Average Power Density per LED die:	1.647W/mm^2
CRI:	80
Die Spacing:	0.15mm

Sampling Method:

LED samples for IESNA LM-80 testing consist of units built from a minimum of three manufacturing lots with each manufacturing lot built from different wafer lots built on non-consecutive days.
These manufacturing lots are picked to represent a wide parametric distribution.

Family products covered by this report:

According to *ENERGY STAR® Requirements for the Use of LM-80 Data*, the following products can be covered by this report base on the information and declaration provided by manufacturer. The information of these models shows that the covered products meet all section 4 requirements of *ENERGY STAR® Requirements for the Use of LM-80 Data* (September 28, 2017)

This report covers the following models:

Testing Model	Multiple Models	Differences Details
HL-AS-2835VDW-3C-S1-08-PCT-HR3(R9)	HL-AS-2835VDW-3C-S1-08-PCT-HR3	Only different Model name for different market
	HL-AS-2835VDW-3C-S1-08L-PCT-HR3	
	HL-AS-2835VDW-3C-S1-08L-PCT-HR3(R9)	
	SL-*B2835FTA-31AD*	
	SL-*B2835FTA-31AD*H	

Note:

1. The first symbol "*" is the letter I /N /W which stand for color temperature. I means 2200-3700K, N means 3700-4700K, W means above 4700K.
2. The second symbol "*" is a different product solution.

1.2 Standards and Reference Documentations

- ANSI/IES LM-80-15: IES Approved Method for Measuring Lumen Maintenance of LED Light Sources.
- CIE 127:2007: Measurement of LEDs
- ENERGY STAR® Requirements for the Use of LM-80 Data (This standard was not accredited by IAS)

1.3 Testing Equipment

Device	Manufacture	Model No	Serial No	Calibration date	Calibration due date
1.0m integrating sphere	SENSING	SCD-20008	N/A	2018-06-28	2019-06-28
spectroradiometer	SENSING	SCD-20008	N/A	2018-06-28	2019-06-28
DC Power Supply	Hanshenpuyuan	HSPY-100-05	2013010210003	2018-05-04	2019-05-04
Standard Light Source	EVERFINE	D204	G100283CA8351158	2018-01-08	2019-01-08
DC Power Supply	BACL	B25001	90020	2018-12-18	2019-12-18
Multilayer aging machine	BACL	B2-270	20023	2018-03-13	2019-03-13
Multilayer aging machine	BACL	B2-270	20024	2018-03-13	2019-03-13
Multilayer aging machine	BACL	B2-270	20015	2018-03-13	2019-03-13
Digital CC&CV DC Power Supply	EVERFINE	WY5015	11090009	2017-12-15	2018-12-15
Digital CC&CV DC Power Supply	EVERFINE	WY5015	11090005	2018-03-26	2019-03-26
Digital CC&CV DC Power Supply	EVERFINE	WY5015	11090003	2018-05-04	2019-05-04

1.4 Drive Level

Samples are driven with a constant direct current (DC) during maintenance test, photometric and electrical measurement. The current value was regulated to within ±3% of the specified value of the manufacturer during maintenance test, and was within ±0.5% during photometric and electrical measurement test.

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 coldest DUTs' case (TMP_{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 ASTM E230 Table 1 "Special Limits".

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 65% during test.

For photometry measurement, the ambient temperature during test was set to 25°C ± 2°C, RH <65%.

1.6 Photometric Measurement Method and Uncertainty

Integrating sphere and spectroradiometer is used to measure luminous flux and chromaticity coordinate u'v'. 2π measurement was used and sample was drived by DC power supply. The forward current was regulated to within ±0.5% of the nominal value. The test system was calibrated by halogen reference lamp. The ambient temperature during test was set to 25°C ± 2°C, RH <65%. The temperature measurement point was located in the sphere and the temperature was detected by a temperature probe.

The uncertainty of the light output measurements is U=1.59% (K=2), at the 95% confidence level. The uncertainty of the correlated color temperature measurements is U=21K (K=2), at the 95% confidence level.

The uncertainty of the temperature is U=0.8671°C (K=2), at the 95% confidence level.

1.7 Statement of Traceability

Bay Area Compliance Laboratories Corp. (Dongguan) attested that all calibration has been performed using suitable standards traceable to National Primary Standards and International System of Units (SI).

1.8 Sample Set

Data Set 1: 85°C, 20mA

Part Number:	HL-AS-2835VDW-3C-S1-08-PCT-HR3(R9)
Number of Units:	25
Case Temperature:	>83°C
Ambient Temperature:	>80°C
Life Test Drive Current:	20mA
Measurement Current:	20mA

Data Set 2: 105°C, 20mA

Part Number:	HL-AS-2835VDW-3C-S1-08-PCT-HR3(R9)
Number of Units:	25
Case Temperature:	>103°C
Ambient Temperature:	>100°C
Life Test Drive Current:	20mA
Measurement Current:	20mA

2 - Summary of Test Result

Data Set:	Sample Size	Failures Observed:	Test Interval	Test Duration	α	β	Reported TM-21 L_{70} Lifetime
1	25	0	1000hrs	6000hrs	3.249E-06	1.003	>36000hours
2	25	0	1000hrs	6000hrs	3.985E-06	1.003	>36000hours

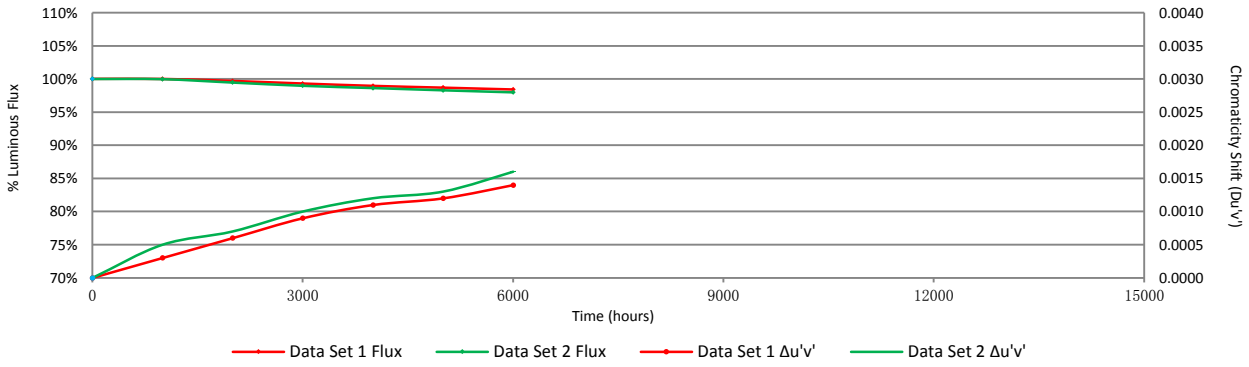
Average Lumen Maintenance (Percentage of Initial Luminous Flux)

Data Set:	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	99.99%	99.69%	99.30%	98.95%	98.68%	98.41%
2	99.97%	99.46%	98.97%	98.63%	98.29%	97.98%

Average Chromaticity Shift

Data Set:	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	0.0003	0.0006	0.0009	0.0011	0.0012	0.0014
2	0.0005	0.0007	0.0010	0.0012	0.0013	0.0016

Average Lumen Maintenance and Chromaticity Shift VS. Time



3 - Test Data

3.1 Data Set 1, 85°C, 20mA (Lumen Maintenance)

No.	Φ(lm)	Lumen Maintenance (%)					
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	132.26	100.05	99.67	99.27	98.90	98.74	98.52
2	129.12	100.08	99.66	99.44	99.06	98.82	98.51
3	131.69	100.15	99.73	99.32	98.94	98.87	98.56
4	130.26	100.06	99.94	99.49	99.19	99.11	98.88
5	129.54	100.07	99.89	99.35	98.97	98.73	98.43
6	130.40	100.17	99.65	99.08	98.93	98.62	98.24
7	129.26	99.94	99.72	99.33	99.26	99.18	98.87
8	131.40	99.83	99.62	99.16	98.55	98.10	97.95
9	131.11	99.95	99.51	99.38	99.00	98.70	98.31
10	130.54	100.10	99.51	99.13	98.90	98.44	98.13
11	130.12	99.82	99.61	99.06	98.75	98.45	98.29
12	130.40	99.94	99.62	99.00	98.93	98.77	98.54
13	130.40	100.09	99.62	99.08	98.70	98.31	97.93
14	131.26	100.05	99.66	99.42	98.74	98.66	98.51
15	128.54	99.83	99.68	99.50	99.19	99.04	98.57
16	128.97	100.16	100.09	99.79	99.56	99.40	99.02
17	131.40	99.92	99.51	99.09	98.71	98.25	98.17
18	129.26	99.83	99.61	99.18	99.03	98.87	98.72
19	129.97	99.94	99.72	99.18	98.48	98.10	97.87
20	130.26	100.06	99.83	99.65	99.19	98.88	98.50
21	130.54	99.83	99.39	98.90	98.82	98.59	98.28
22	129.12	99.82	99.67	99.52	99.29	99.06	98.98
23	128.83	100.05	99.83	99.20	98.73	98.27	97.88
24	128.40	100.14	99.88	99.61	99.14	98.60	98.44
25	131.26	99.94	99.61	99.27	98.74	98.35	98.13
Avg.	130.17	99.99	99.69	99.30	98.95	98.68	98.41
Med.	130.26	100.05	99.66	99.27	98.93	98.70	98.44
st dev	1.06	0.12	0.15	0.22	0.25	0.34	0.33
Min.	128.40	99.82	99.39	98.90	98.48	98.10	97.87
Max.	132.26	100.17	100.09	99.79	99.56	99.40	99.02

3.2 Data Set 1, 85°C, 20mA (Forward Voltage)

No.	Forward Voltage (V)						
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	52.58	52.57	52.52	52.71	52.63	52.48	52.64
2	52.45	52.40	52.49	52.64	52.62	52.39	52.51
3	52.55	52.49	52.49	52.70	52.74	52.39	52.64
4	52.46	52.40	52.49	52.69	52.74	52.49	52.66
5	52.46	52.39	52.47	52.63	52.67	52.38	52.56
6	52.40	52.35	52.45	52.60	52.64	52.35	52.50
7	52.40	52.33	52.45	52.58	52.63	52.34	52.50
8	52.54	52.46	52.46	52.71	52.73	52.49	52.67
9	52.52	52.46	52.44	52.70	52.73	52.47	52.63
10	52.44	52.38	52.46	52.67	52.67	52.41	52.56
11	52.48	52.41	52.45	52.67	52.68	52.40	52.55
12	52.55	52.48	52.46	52.71	52.72	52.48	52.67
13	52.57	52.51	52.46	52.70	52.72	52.49	52.65
14	52.43	52.37	52.44	52.62	52.64	52.35	52.53
15	52.35	52.29	52.42	52.61	52.62	52.30	52.49
16	52.48	52.42	52.47	52.65	52.70	52.45	52.61
17	52.40	52.34	52.43	52.59	52.65	52.35	52.48
18	52.47	52.39	52.47	52.64	52.67	52.43	52.58
19	52.48	52.40	52.44	52.60	52.68	52.38	52.53
20	52.42	52.36	52.47	52.62	52.68	52.35	52.54
21	52.42	52.36	52.43	52.66	52.67	52.41	52.53
22	52.46	52.39	52.47	52.69	52.70	52.46	52.61
23	52.40	52.35	52.45	52.61	52.66	52.39	52.51
24	52.41	52.35	52.48	52.64	52.68	52.41	52.56
25	52.58	52.51	52.44	52.76	52.78	52.52	52.70
Avg.	52.47	52.41	52.46	52.66	52.68	52.41	52.58
Med.	52.46	52.39	52.46	52.65	52.68	52.41	52.56
st dev	0.06	0.07	0.02	0.05	0.04	0.06	0.07
Min.	52.35	52.29	52.42	52.58	52.62	52.30	52.48
Max.	52.58	52.57	52.52	52.76	52.78	52.52	52.70

3.3 Data Set 1, 85°C, 20mA (Chromaticity Shift)

No.	u'	v'	CCT(K)	Chromaticity Shift (Δu'v')					
	0hr(Initial)			1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	0.2598	0.5323	2736	0.0002	0.0008	0.0012	0.0015	0.0014	0.0016
2	0.2626	0.5314	2682	0.0006	0.0006	0.0009	0.0009	0.0012	0.0014
3	0.2593	0.5322	2746	0.0008	0.0011	0.0013	0.0016	0.0016	0.0019
4	0.2616	0.5333	2694	0.0004	0.0005	0.0011	0.0014	0.0018	0.0021
5	0.2626	0.5308	2686	0.0004	0.0012	0.0014	0.0016	0.0014	0.0011
6	0.2608	0.5312	2718	0.0001	0.0004	0.0004	0.0005	0.0007	0.0003
7	0.2620	0.5313	2694	0.0004	0.0005	0.0005	0.0005	0.0005	0.0008
8	0.2614	0.5324	2704	0.0003	0.0006	0.0006	0.0003	0.0005	0.0007
9	0.2620	0.5307	2698	0.0001	0.0001	0.0004	0.0003	0.0005	0.0006
10	0.2617	0.5321	2698	0.0003	0.0005	0.0010	0.0010	0.0010	0.0012
11	0.2617	0.5326	2696	0.0001	0.0003	0.0011	0.0012	0.0012	0.0013
12	0.2605	0.5316	2724	0.0001	0.0003	0.0006	0.0011	0.0011	0.0014
13	0.2605	0.5312	2726	0.0002	0.0002	0.0007	0.0011	0.0010	0.0016
14	0.2616	0.5343	2692	0.0001	0.0002	0.0008	0.0012	0.0013	0.0016
15	0.2613	0.5282	2722	0.0004	0.0005	0.0009	0.0011	0.0016	0.0019
16	0.2627	0.5311	2680	0.0004	0.0008	0.0010	0.0011	0.0015	0.0019
17	0.2597	0.5320	2738	0.0002	0.0008	0.0010	0.0009	0.0014	0.0018
18	0.2609	0.5318	2714	0.0003	0.0006	0.0012	0.0012	0.0016	0.0020
19	0.2597	0.5316	2740	0.0004	0.0008	0.0007	0.0011	0.0014	0.0017
20	0.2604	0.5326	2724	0.0003	0.0008	0.0009	0.0011	0.0011	0.0012
21	0.2590	0.5304	2760	0.0001	0.0006	0.0008	0.0010	0.0009	0.0011
22	0.2612	0.5314	2710	0.0004	0.0012	0.0010	0.0013	0.0012	0.0015
23	0.2603	0.5288	2740	0.0005	0.0004	0.0006	0.0008	0.0008	0.0012
24	0.2629	0.5294	2684	0.0006	0.0008	0.0008	0.0013	0.0017	0.0015
25	0.2616	0.5338	2694	0.0004	0.0009	0.0014	0.0013	0.0016	0.0021
Avg.	0.2611	0.5315	2712	0.0003	0.0006	0.0009	0.0011	0.0012	0.0014
Med.	0.2613	0.5316	2710	0.0003	0.0006	0.0009	0.0011	0.0012	0.0015
st dev	0.0011	0.0014	23	0.0002	0.0003	0.0003	0.0003	0.0004	0.0005
Min.	0.2590	0.5282	2680	0.0001	0.0001	0.0004	0.0003	0.0005	0.0003
Max.	0.2629	0.5343	2760	0.0008	0.0012	0.0014	0.0016	0.0018	0.0021

3.4 Data Set 2, 105°C, 20mA (Lumen Maintenance)

No.	Φ(lm)	Lumen Maintenance (%)					
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
26	130.40	99.87	99.38	98.93	98.31	97.85	97.62
27	130.97	99.98	99.34	98.65	98.27	97.96	97.89
28	130.26	99.98	99.52	99.19	98.73	98.50	98.11
29	130.12	100.19	99.61	99.22	99.06	98.60	98.29
30	130.12	100.08	99.72	98.99	98.52	98.22	97.83
31	130.69	99.98	99.45	98.86	98.32	98.25	98.02
32	129.83	99.98	99.45	98.90	98.82	98.44	98.21
33	129.40	99.98	99.74	99.00	98.76	98.45	98.15
34	131.97	99.98	99.40	98.66	98.13	98.05	97.52
35	130.69	100.08	99.53	98.86	98.25	97.87	97.64
36	129.69	100.19	99.58	99.16	99.01	98.62	98.23
37	130.26	100.08	99.72	99.11	98.65	98.34	97.88
38	131.54	99.76	99.19	98.60	98.30	97.92	97.61
39	131.54	99.98	99.65	99.13	98.75	98.37	97.99
40	127.83	100.09	99.73	99.04	98.57	98.10	98.02
41	130.54	99.87	99.39	99.28	99.05	98.82	98.67
42	131.69	99.98	99.29	98.64	98.49	98.19	97.96
43	130.97	99.66	98.81	98.50	98.34	98.04	97.50
44	128.69	100.09	99.53	99.00	98.69	98.45	98.07
45	130.83	99.98	99.53	99.37	99.29	99.21	98.91
46	131.97	99.87	99.37	99.11	99.04	98.58	98.51
47	128.26	99.75	99.10	98.86	98.63	98.08	97.77
48	130.54	100.20	99.72	99.20	98.74	98.13	97.75
49	131.40	99.76	99.16	99.01	98.40	97.87	97.56
50	130.54	99.98	99.53	98.97	98.67	98.28	97.67
Avg.	130.43	99.97	99.46	98.97	98.63	98.29	97.98
Med.	130.54	99.98	99.52	99.00	98.65	98.25	97.96
st dev	1.07	0.14	0.23	0.23	0.30	0.33	0.36
Min.	127.83	99.66	98.81	98.50	98.13	97.85	97.50
Max.	131.97	100.20	99.74	99.37	99.29	99.21	98.91

3.5 Data Set 2, 105°C, 20mA (Forward Voltage)

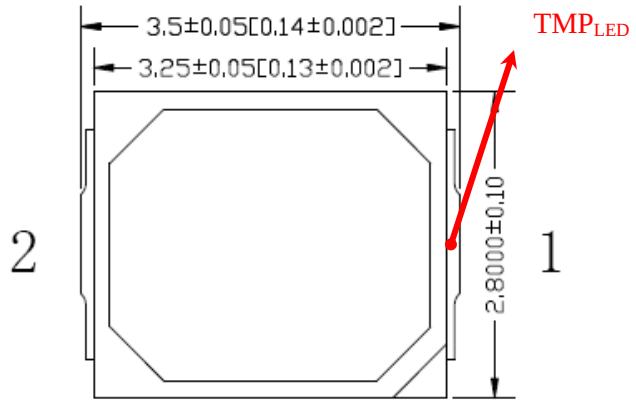
No.	Forward Voltage (V)						
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
26	52.46	52.40	52.44	52.67	52.67	52.40	52.57
27	52.42	52.34	52.44	52.63	52.67	52.45	52.51
28	52.53	52.47	52.48	52.66	52.73	52.48	52.61
29	52.44	52.39	52.45	52.63	52.68	52.40	52.57
30	52.44	52.39	52.44	52.63	52.67	52.40	52.53
31	52.47	52.40	52.44	52.64	52.68	52.44	52.55
32	52.55	52.48	52.46	52.70	52.74	52.52	52.64
33	52.42	52.34	52.44	52.58	52.62	52.37	52.50
34	52.42	52.34	52.40	52.61	52.67	52.39	52.46
35	52.53	52.46	52.49	52.67	52.73	52.48	52.62
36	52.46	52.41	52.47	52.61	52.68	52.39	52.55
37	52.49	52.43	52.49	52.64	52.68	52.43	52.59
38	52.55	52.46	52.53	52.67	52.70	52.40	52.59
39	52.60	52.53	52.50	52.73	52.79	52.43	52.62
40	52.42	52.38	52.49	52.62	52.66	52.52	52.69
41	52.44	52.37	52.45	52.64	52.74	52.42	52.53
42	52.51	52.43	52.47	52.63	52.72	52.48	52.62
43	52.49	52.39	52.46	52.65	52.63	52.43	52.59
44	52.38	52.35	52.47	52.53	52.69	52.33	52.45
45	52.44	52.38	52.47	52.60	52.74	52.40	52.53
46	52.55	52.47	52.47	52.59	52.66	52.45	52.63
47	52.47	52.40	52.45	52.60	52.76	52.39	52.53
48	52.56	52.50	52.45	52.65	52.68	52.51	52.65
49	52.45	52.38	52.46	52.61	52.76	52.40	52.51
50	52.55	52.47	52.44	52.67	52.76	52.47	52.61
Avg.	52.48	52.41	52.46	52.63	52.70	52.43	52.57
Med.	52.47	52.40	52.46	52.63	52.68	52.43	52.57
st dev	0.06	0.05	0.03	0.04	0.04	0.05	0.06
Min.	52.38	52.34	52.40	52.53	52.62	52.33	52.45
Max.	52.60	52.53	52.53	52.73	52.79	52.52	52.69

3.6 Data Set 2, 105°C, 20mA (Chromaticity Shift)

No.	u'	v'	CCT(K)	Chromaticity Shift (Δu'v')					
	0hr(Initial)			1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
26	0.2611	0.5319	2712	0.0004	0.0003	0.0007	0.0013	0.0016	0.0020
27	0.2596	0.5304	2748	0.0003	0.0005	0.0006	0.0007	0.0008	0.0011
28	0.2605	0.5310	2728	0.0001	0.0003	0.0007	0.0003	0.0006	0.0009
29	0.2605	0.5295	2734	0.0006	0.0008	0.0011	0.0009	0.0009	0.0011
30	0.2610	0.5308	2716	0.0010	0.0012	0.0011	0.0013	0.0012	0.0014
31	0.2612	0.5333	2704	0.0006	0.0009	0.0013	0.0013	0.0012	0.0016
32	0.2616	0.5321	2700	0.0005	0.0009	0.0012	0.0013	0.0015	0.0018
33	0.2615	0.5333	2696	0.0005	0.0007	0.0011	0.0012	0.0013	0.0018
34	0.2593	0.5324	2746	0.0004	0.0007	0.0010	0.0013	0.0017	0.0022
35	0.2608	0.5317	2718	0.0005	0.0009	0.0012	0.0011	0.0014	0.0016
36	0.2622	0.5332	2684	0.0004	0.0006	0.0012	0.0013	0.0016	0.0019
37	0.2619	0.5328	2690	0.0005	0.0009	0.0010	0.0010	0.0011	0.0015
38	0.2608	0.5314	2720	0.0003	0.0003	0.0013	0.0013	0.0011	0.0013
39	0.2618	0.5331	2692	0.0004	0.0007	0.0011	0.0012	0.0010	0.0016
40	0.2611	0.5316	2712	0.0004	0.0006	0.0010	0.0013	0.0015	0.0014
41	0.2582	0.5271	2792	0.0007	0.0009	0.0011	0.0014	0.0013	0.0014
42	0.2599	0.5312	2738	0.0003	0.0007	0.0007	0.0013	0.0015	0.0020
43	0.2613	0.5340	2698	0.0010	0.0011	0.0016	0.0016	0.0020	0.0026
44	0.2609	0.5316	2716	0.0007	0.0011	0.0010	0.0011	0.0016	0.0021
45	0.2610	0.5317	2714	0.0007	0.0008	0.0013	0.0010	0.0011	0.0016
46	0.2609	0.5331	2710	0.0003	0.0002	0.0004	0.0010	0.0010	0.0014
47	0.2638	0.5327	2654	0.0006	0.0007	0.0011	0.0006	0.0009	0.0015
48	0.2623	0.5336	2680	0.0001	0.0004	0.0007	0.0009	0.0011	0.0013
49	0.2581	0.5299	2780	0.0004	0.0007	0.0010	0.0011	0.0011	0.0013
50	0.2620	0.5336	2686	0.0006	0.0005	0.0014	0.0021	0.0018	0.0021
Avg.	0.2609	0.5319	2715	0.0005	0.0007	0.0010	0.0012	0.0013	0.0016
Med.	0.2610	0.5319	2712	0.0005	0.0007	0.0011	0.0012	0.0012	0.0016
st dev	0.0012	0.0016	30	0.0002	0.0003	0.0003	0.0003	0.0003	0.0004
Min.	0.2581	0.5271	2654	0.0001	0.0002	0.0004	0.0003	0.0006	0.0009
Max.	0.2638	0.5340	2792	0.0010	0.0012	0.0016	0.0021	0.0020	0.0026

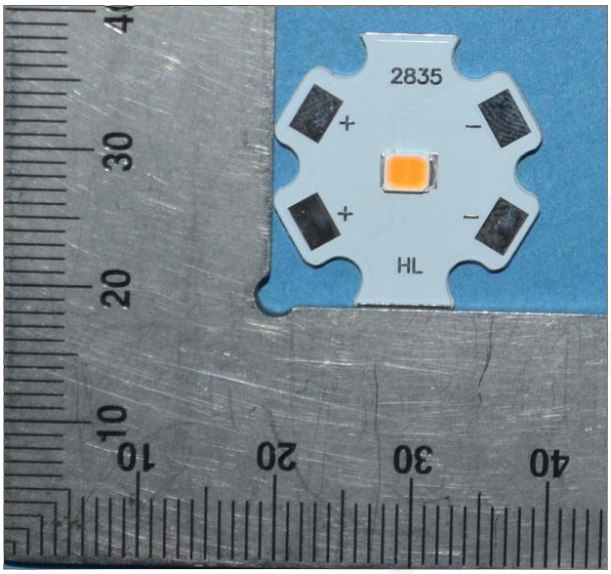
4 - DUT Photo

4.1 Mechanical Dimensions



All dimensions are in millimeter

4.2 DUT Photo



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