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-AM-2835HW-S1-08HL-HR6

Report Type: 6000 Hours Test Report	**Product Type:** LED Package
Reviewed By:	Pote Wang
Report Number:	RSZ200925502-10-6000
Test Date:	2020-09-29 to 2021-06-22
Report Date:	2021-07-09
Approved by:	Bill Xiong / EE Engineer
Prepared By:	Bay Area Compliance Laboratories Corp. (Dongguan). No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China. Tel: +86-0769-86858888 Fax:+86-0769-86858588

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 2020-09-25. The samples were numbered from 1 to 25 and 26 to 50.

Manufacturer:	Hongli Zhihui Group Co.,Ltd. Guangzhou Branch
Part Number:	HL-AM-2835HW-S1-08HL-HR6
Part Type:	LED Package
#Drive Level:	DC 60mA
#Nominal CCT:	2700K
#Power:	0.2W
#Average Current Density per LED die:	812.939mA/mm^2
#Average Power Density per LED die:	2.710W/mm^2
#CRI:	95
#Die Spacing:	NA

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:

Model Name	Total Input Current (mA)	Power (W)	CCT (K)	Number of dies	Driver current per die (mA)	Current Density per Die (mA/mm^2)	Power Density per PCB (W/mm^2)	Die Spacing (mm)
HL-AM-2835HW-S1-08HL-HR6	60	0.2	2700	1	60	812.939	0.0204	/
HL-AM-2835H***W-S1-08**-HR6-***	60	0.2	2200-6500	1	60	812.939	0.0204	/
HL-AM-2835D***W-S1-08**-HR6-***	60	0.2	2200-6500	1	60	344.45	0.0204	/
HL-AM-2835H***W-S1-08**-HR6-DT-***	60	0.2	2200-6500	1	60	812.939	0.0204	/
HL-AM-2835D***W-S1-08**-HR6-DT-***	60	0.2	2200-6500	1	60	344.45	0.0204	/
HL-A-2835H***W-S1-08**-HR6-***	60	0.2	2200-6500	1	60	812.939	0.0204	/
HL-A-2835D***W-S1-08**-HR6-***	60	0.2	2200-6500	1	60	344.45	0.0204	/
HL-A-2835H***W-S1-08**-HR6-DT-***	60	0.2	2200-6500	1	60	812.939	0.0204	/
HL-A-2835D***W-S1-08**-HR6-DT-***	60	0.2	2200-6500	1	60	344.45	0.0204	/

Note:
1. The first "***" is a number from 1 to 999 which stand for the brightness level.
2. The second "**" is a letter HL or L or None which stands for the bonding wire style.
3. The third"***" is the letter, which stands for the customer code.

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
High Accuracy Array Spectroradiometer	EVERFINE	HAAS 2000	P600674CM5391140	2020-10-22	2021-10-21
0.5M Integrating Sphere	EVERFINE	0.5m	NA	2020-10-22	2021-10-21
LED Test Source	EVERFINE	LTS-300	P185616CJ1391143	2020-10-21	2021-10-20
Standard Light Source	EVERFINE	D062	1011093	2020-10-20	2021-10-19
High Accuracy Array Spectroradiometer	EVERFINE	HAAS 2000	P600674CM5391140	2020-10-22	2021-10-21
Multilayer aging machine	BACL	B2-270	20023	2021-02-24	2022-02-23
Program-controlled D.C. Stabilized Voltage Supply	Hanshenpuyuan	HSPY-60-03	N/A	2020-07-01	2021-06-30

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: 55°C, 60mA

Part Number:	HL-AM-2835HW-S1-08HL-HR6
Number of Units:	25
Case Temperature:	>53°C
Ambient Temperature:	>50°C
Life Test Drive Current:	60mA
Measurement Current:	60mA

Data Set 2: 85°C, 60mA

Part Number:	HL-AM-2835HW-S1-08HL-HR6
Number of Units:	25
Case Temperature:	>83°C
Ambient Temperature:	>80°C
Life Test Drive Current:	60mA
Measurement Current:	60mA

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	2.333E-06	1.004	>36000 hours
2	25	0	1000hrs	6000hrs	2.974E-06	1.004	>36000 hours

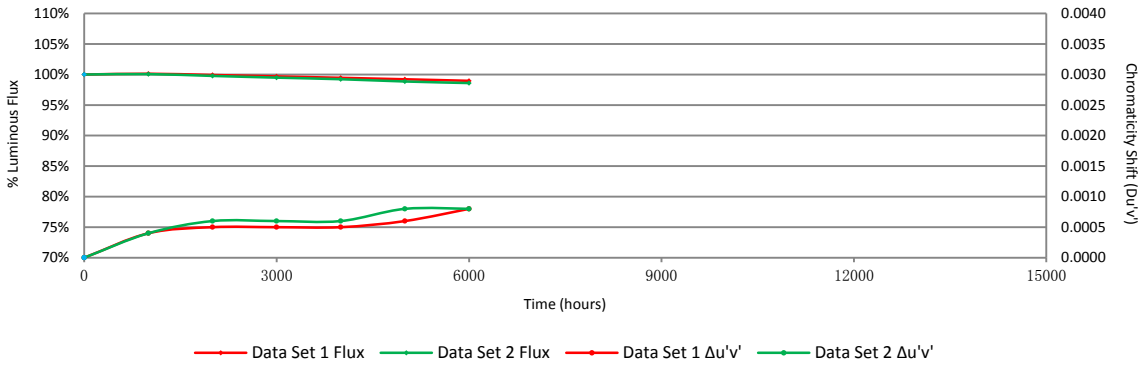
Average Lumen Maintenance (Percentage of Initial Luminous Flux)

Data Set:	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	100.13%	99.92%	99.69%	99.46%	99.22%	98.97%
2	100.07%	99.77%	99.49%	99.23%	98.86%	98.60%

Average Chromaticity Shift

Data Set:	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	0.0004	0.0005	0.0005	0.0005	0.0006	0.0008
2	0.0004	0.0006	0.0006	0.0006	0.0008	0.0008

Average Lumen Maintenance and Chromaticity Shift VS. Time



3 - Test Data

3.1 Data Set 1, 55°C, 60mA (Lumen Maintenance)

No.	Φ(lm)	Lumen Maintenance (%)					
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	18.86	100.05	99.95	99.68	99.47	99.05	98.89
2	19.33	100.36	100.05	99.84	99.48	99.28	99.22
3	18.96	99.89	99.68	99.58	99.37	99.21	99.10
4	18.91	100.05	99.84	99.79	99.47	99.26	99.10
5	18.94	100.11	99.84	99.74	99.31	99.10	98.89
6	19.05	100.42	100.21	100.16	99.74	99.16	98.79
7	18.90	100.32	100.05	99.84	99.58	99.15	98.68
8	18.80	100.16	100.05	100.00	99.79	99.63	99.10
9	18.65	100.16	99.89	99.62	99.57	99.20	99.03
10	18.60	100.22	99.84	99.62	99.52	99.25	98.98
11	19.14	100.05	99.90	99.53	99.43	99.37	99.11
12	19.09	100.58	100.16	99.74	99.42	99.06	98.80
13	18.85	100.32	100.05	99.95	99.63	99.52	99.36
14	18.80	100.27	99.89	99.57	99.47	99.20	99.10
15	18.74	100.59	100.32	99.89	99.79	99.20	99.04
16	18.87	99.74	99.68	99.63	99.58	99.52	99.26
17	18.77	100.43	100.27	99.79	99.57	99.36	98.99
18	19.01	100.05	99.79	99.68	99.42	99.32	99.00
19	18.72	99.89	99.84	99.47	99.25	99.15	98.77
20	18.76	99.73	99.52	99.15	98.88	98.45	98.19
21	18.77	100.05	99.95	99.47	99.31	99.09	98.77
22	18.95	99.95	99.84	99.58	99.10	98.94	98.52
23	18.75	100.16	100.05	99.89	99.73	99.52	99.36
24	18.73	99.73	99.63	99.47	99.41	99.36	99.25
25	19.39	100.05	99.74	99.54	99.33	99.07	99.02
Avg.	18.89	100.13	99.92	99.69	99.46	99.22	98.97
Med.	18.86	100.11	99.89	99.68	99.47	99.20	99.02
st dev	0.19	0.24	0.20	0.21	0.21	0.23	0.26
Min.	18.60	99.73	99.52	99.15	98.88	98.45	98.19
Max.	19.39	100.59	100.32	100.16	99.79	99.63	99.36

3.2 Data Set 1, 55°C, 60mA (Forward Voltage)

No.	Forward Voltage (V)						
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	3.080	3.073	3.072	3.072	3.082	3.076	3.079
2	3.079	3.074	3.070	3.070	3.079	3.076	3.082
3	3.055	3.050	3.047	3.053	3.055	3.052	3.061
4	3.066	3.060	3.057	3.057	3.066	3.062	3.066
5	3.080	3.075	3.070	3.072	3.079	3.076	3.080
6	3.044	3.042	3.034	3.038	3.046	3.042	3.042
7	3.042	3.031	3.032	3.034	3.039	3.036	3.036
8	3.045	3.042	3.038	3.036	3.044	3.041	3.041
9	3.072	3.066	3.059	3.061	3.070	3.068	3.065
10	3.056	3.054	3.051	3.049	3.058	3.055	3.054
11	3.045	3.042	3.042	3.038	3.050	3.045	3.043
12	3.070	3.065	3.061	3.059	3.072	3.070	3.068
13	3.021	3.020	3.015	3.011	3.025	3.019	3.019
14	3.038	3.041	3.038	3.038	3.049	3.041	3.041
15	3.064	3.066	3.061	3.061	3.071	3.067	3.064
16	3.034	3.034	3.030	3.026	3.038	3.032	3.033
17	3.048	3.044	3.040	3.038	3.052	3.048	3.045
18	3.065	3.066	3.061	3.061	3.072	3.067	3.062
19	3.021	3.020	3.013	3.015	3.028	3.021	3.020
20	3.020	3.017	3.013	3.011	3.023	3.020	3.018
21	3.015	3.007	3.005	3.007	3.016	3.011	3.010
22	3.039	3.040	3.034	3.034	3.044	3.039	3.041
23	3.045	3.044	3.038	3.038	3.052	3.047	3.050
24	3.060	3.059	3.053	3.051	3.063	3.060	3.060
25	3.059	3.052	3.049	3.049	3.056	3.053	3.056
Avg.	3.051	3.047	3.043	3.043	3.053	3.049	3.049
Med.	3.048	3.044	3.042	3.038	3.052	3.048	3.050
st dev	0.019	0.019	0.019	0.019	0.018	0.019	0.020
Min.	3.015	3.007	3.005	3.007	3.016	3.011	3.010
Max.	3.080	3.075	3.072	3.072	3.082	3.076	3.082

3.3 Data Set 1, 55°C, 60mA (Chromaticity Shift)

No.	u'	v'	CCT(K)	Chromaticity Shift (Δu'v')					
	0hr(Initial)			1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	0.2598	0.5341	2728	0.0001	0.0004	0.0003	0.0008	0.0008	0.0009
2	0.2555	0.5328	2825	0.0003	0.0004	0.0006	0.0006	0.0009	0.0012
3	0.2581	0.5324	2771	0.0006	0.0006	0.0005	0.0004	0.0004	0.0009
4	0.2599	0.5327	2733	0.0005	0.0007	0.0006	0.0003	0.0004	0.0005
5	0.2575	0.5315	2787	0.0006	0.0006	0.0006	0.0005	0.0005	0.0004
6	0.2584	0.5320	2767	0.0005	0.0007	0.0008	0.0003	0.0004	0.0005
7	0.2579	0.5320	2777	0.0004	0.0004	0.0006	0.0005	0.0005	0.0009
8	0.2586	0.5316	2764	0.0003	0.0003	0.0004	0.0005	0.0008	0.0008
9	0.2582	0.5312	2773	0.0004	0.0007	0.0005	0.0005	0.0005	0.0008
10	0.2600	0.5335	2727	0.0004	0.0004	0.0005	0.0006	0.0004	0.0006
11	0.2555	0.5320	2828	0.0004	0.0005	0.0005	0.0005	0.0006	0.0008
12	0.2562	0.5327	2810	0.0003	0.0004	0.0004	0.0001	0.0004	0.0005
13	0.2564	0.5327	2804	0.0004	0.0004	0.0006	0.0005	0.0006	0.0008
14	0.2563	0.5310	2815	0.0005	0.0007	0.0007	0.0004	0.0006	0.0006
15	0.2618	0.5330	2692	0.0003	0.0003	0.0004	0.0006	0.0009	0.0010
16	0.2584	0.5337	2759	0.0002	0.0002	0.0003	0.0006	0.0013	0.0013
17	0.2585	0.5324	2762	0.0005	0.0006	0.0006	0.0003	0.0004	0.0006
18	0.2565	0.5301	2815	0.0006	0.0007	0.0009	0.0004	0.0003	0.0004
19	0.2583	0.5312	2772	0.0006	0.0005	0.0005	0.0006	0.0005	0.0004
20	0.2573	0.5331	2784	0.0005	0.0006	0.0005	0.0005	0.0005	0.0009
21	0.2550	0.5313	2842	0.0003	0.0006	0.0006	0.0006	0.0006	0.0007
22	0.2561	0.5305	2823	0.0001	0.0004	0.0004	0.0009	0.0011	0.0014
23	0.2597	0.5311	2742	0.0003	0.0005	0.0004	0.0008	0.0008	0.0008
24	0.2608	0.5321	2715	0.0004	0.0007	0.0005	0.0004	0.0004	0.0007
25	0.2561	0.5328	2811	0.0006	0.0004	0.0007	0.0004	0.0005	0.0006
Avg.	0.2579	0.5321	2777	0.0004	0.0005	0.0005	0.0005	0.0006	0.0008
Med.	0.2581	0.5321	2773	0.0004	0.0005	0.0005	0.0005	0.0005	0.0008
st dev	0.0018	0.0010	39	0.0001	0.0001	0.0001	0.0002	0.0003	0.0003
Min.	0.2550	0.5301	2692	0.0001	0.0002	0.0003	0.0001	0.0003	0.0004
Max.	0.2618	0.5341	2842	0.0006	0.0007	0.0009	0.0009	0.0013	0.0014

3.4 Data Set 2, 85°C, 60mA (Lumen Maintenance)

No.	Φ(lm)	Lumen Maintenance (%)					
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
26	18.89	99.74	99.42	99.26	98.94	98.46	98.41
27	18.89	99.79	99.47	99.31	98.89	98.84	98.52
28	19.09	100.05	99.84	99.37	99.00	98.85	98.69
29	19.08	99.84	99.48	99.27	98.79	98.64	98.17
30	19.08	99.90	99.58	99.32	98.95	98.69	98.22
31	18.91	99.84	99.52	99.10	98.78	98.31	98.10
32	18.69	99.95	99.52	99.20	98.72	98.66	98.29
33	18.30	99.89	99.51	99.40	99.07	98.63	98.42
34	19.16	100.16	99.95	99.79	99.43	98.96	98.80
35	18.71	99.95	99.41	99.31	99.14	98.72	98.56
36	19.08	100.26	99.95	99.53	99.27	99.00	98.90
37	18.84	100.11	99.79	99.36	99.15	98.62	98.57
38	19.02	100.11	99.63	99.47	99.16	98.63	98.42
39	18.92	99.95	99.52	99.42	99.15	98.52	98.31
40	19.21	99.79	99.48	99.12	98.85	98.33	97.76
41	18.74	99.57	99.52	99.47	99.04	98.61	98.29
42	18.80	100.32	99.95	99.63	99.47	98.94	98.62
43	18.83	100.32	100.27	99.79	99.36	98.88	98.46
44	18.58	100.38	100.16	99.73	99.52	99.30	98.76
45	18.74	100.32	100.27	99.89	99.84	99.36	98.99
46	19.22	100.31	99.90	99.69	99.64	98.96	98.70
47	18.76	100.37	100.16	99.84	99.79	99.52	99.25
48	18.39	100.33	100.05	99.84	99.78	99.46	99.35
49	18.98	100.21	99.95	99.47	99.42	99.32	99.26
50	18.70	100.21	100.05	99.68	99.57	99.36	99.20
Avg.	18.86	100.07	99.77	99.49	99.23	98.86	98.60
Med.	18.89	100.11	99.79	99.47	99.15	98.84	98.56
st dev	0.23	0.23	0.29	0.24	0.34	0.35	0.40
Min.	18.30	99.57	99.41	99.10	98.72	98.31	97.76
Max.	19.22	100.38	100.27	99.89	99.84	99.52	99.35

3.5 Data Set 2, 85°C, 60mA (Forward Voltage)

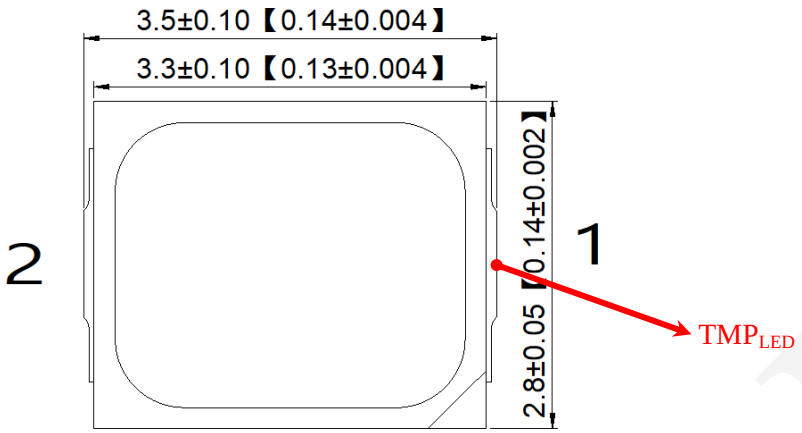
No.	Forward Voltage (V)						
	0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
26	3.049	3.044	3.042	3.038	3.052	3.047	3.049
27	3.064	3.056	3.057	3.055	3.065	3.061	3.061
28	3.063	3.063	3.057	3.061	3.068	3.065	3.063
29	3.036	3.035	3.032	3.030	3.038	3.036	3.033
30	3.066	3.060	3.057	3.057	3.067	3.063	3.067
31	3.076	3.074	3.068	3.070	3.075	3.075	3.073
32	3.068	3.066	3.061	3.061	3.069	3.067	3.064
33	3.024	3.021	3.022	3.024	3.028	3.021	3.021
34	3.036	3.033	3.028	3.030	3.037	3.035	3.034
35	3.041	3.040	3.038	3.036	3.044	3.040	3.045
36	3.081	3.068	3.063	3.063	3.077	3.071	3.072
37	3.050	3.044	3.040	3.042	3.052	3.044	3.045
38	3.055	3.051	3.045	3.047	3.055	3.048	3.051
39	3.076	3.068	3.068	3.070	3.079	3.072	3.073
40	3.062	3.061	3.057	3.053	3.065	3.061	3.063
41	3.073	3.071	3.063	3.065	3.075	3.070	3.067
42	3.075	3.074	3.065	3.070	3.079	3.074	3.075
43	3.044	3.041	3.034	3.038	3.048	3.040	3.039
44	3.014	3.013	3.011	3.009	3.019	3.012	3.013
45	3.066	3.068	3.061	3.059	3.070	3.065	3.065
46	3.064	3.062	3.057	3.057	3.068	3.062	3.063
47	3.073	3.079	3.070	3.068	3.081	3.076	3.074
48	3.002	3.001	2.997	2.997	3.009	3.001	3.004
49	3.029	3.032	3.028	3.024	3.037	3.028	3.029
50	3.076	3.075	3.070	3.072	3.080	3.076	3.073
Avg.	3.055	3.052	3.048	3.048	3.057	3.052	3.053
Med.	3.063	3.060	3.057	3.055	3.065	3.061	3.063
st dev	0.021	0.021	0.020	0.020	0.020	0.021	0.021
Min.	3.002	3.001	2.997	2.997	3.009	3.001	3.004
Max.	3.081	3.079	3.070	3.072	3.081	3.076	3.075

3.6 Data Set 2, 85°C, 60mA (Chromaticity Shift)

No.	u'	v'	CCT(K)	Chromaticity Shift (Δu'v')					
	0hr(Initial)			1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
26	0.2584	0.5314	2769	0.0006	0.0005	0.0004	0.0006	0.0005	0.0008
27	0.2589	0.5335	2750	0.0004	0.0008	0.0008	0.0004	0.0007	0.0009
28	0.2566	0.5321	2803	0.0004	0.0004	0.0004	0.0007	0.0010	0.0010
29	0.2579	0.5341	2768	0.0004	0.0006	0.0005	0.0006	0.0007	0.0010
30	0.2572	0.5320	2792	0.0004	0.0005	0.0007	0.0006	0.0011	0.0008
31	0.2561	0.5299	2826	0.0004	0.0004	0.0004	0.0009	0.0009	0.0008
32	0.2619	0.5332	2690	0.0006	0.0006	0.0007	0.0004	0.0006	0.0004
33	0.2605	0.5318	2723	0.0001	0.0004	0.0003	0.0007	0.0011	0.0010
34	0.2570	0.5321	2797	0.0001	0.0006	0.0006	0.0008	0.0010	0.0008
35	0.2590	0.5309	2757	0.0006	0.0009	0.0006	0.0004	0.0009	0.0004
36	0.2558	0.5308	2826	0.0004	0.0009	0.0005	0.0005	0.0004	0.0006
37	0.2577	0.5316	2782	0.0008	0.0009	0.0006	0.0004	0.0008	0.0006
38	0.2577	0.5325	2780	0.0004	0.0008	0.0005	0.0005	0.0008	0.0007
39	0.2582	0.5335	2764	0.0002	0.0004	0.0005	0.0007	0.0011	0.0009
40	0.2572	0.5323	2791	0.0006	0.0006	0.0005	0.0004	0.0006	0.0006
41	0.2603	0.5334	2722	0.0001	0.0006	0.0006	0.0008	0.0010	0.0009
42	0.2565	0.5323	2804	0.0004	0.0005	0.0005	0.0006	0.0009	0.0009
43	0.2593	0.5315	2750	0.0003	0.0005	0.0006	0.0006	0.0011	0.0009
44	0.2570	0.5304	2802	0.0005	0.0009	0.0005	0.0005	0.0008	0.0006
45	0.2589	0.5332	2750	0.0004	0.0007	0.0008	0.0007	0.0009	0.0008
46	0.2569	0.5324	2797	0.0003	0.0005	0.0005	0.0006	0.0011	0.0008
47	0.2578	0.5308	2783	0.0002	0.0008	0.0006	0.0004	0.0008	0.0008
48	0.2570	0.5311	2800	0.0005	0.0006	0.0005	0.0004	0.0010	0.0006
49	0.2592	0.5330	2744	0.0007	0.0008	0.0009	0.0002	0.0004	0.0004
50	0.2593	0.5335	2742	0.0004	0.0005	0.0004	0.0005	0.0010	0.0008
Avg.	0.2581	0.5321	2772	0.0004	0.0006	0.0006	0.0006	0.0008	0.0008
Med.	0.2578	0.5321	2780	0.0004	0.0006	0.0005	0.0006	0.0009	0.0008
st dev	0.0015	0.0011	33	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002
Min.	0.2558	0.5299	2690	0.0001	0.0004	0.0003	0.0002	0.0004	0.0004
Max.	0.2619	0.5341	2826	0.0008	0.0009	0.0009	0.0009	0.0011	0.0010

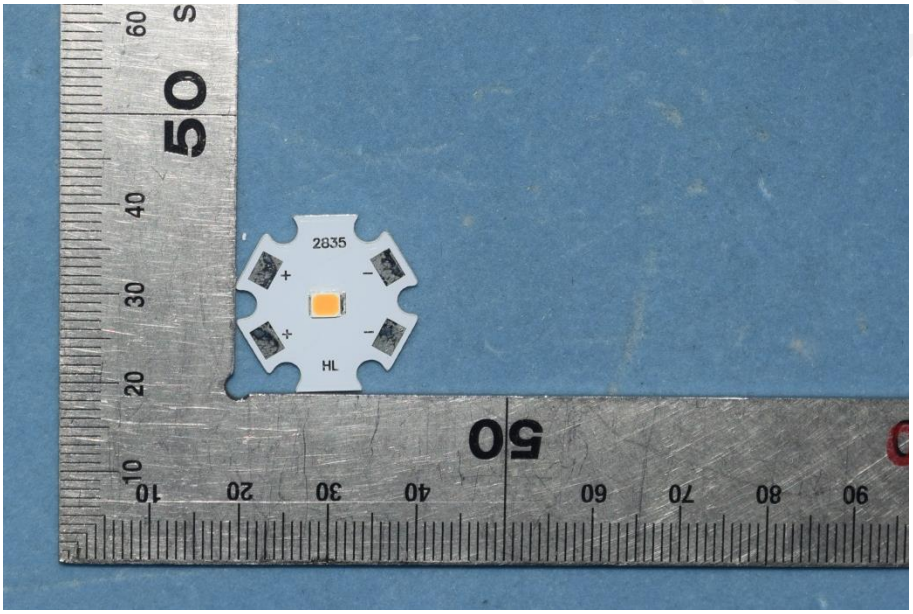
4 - DUT Photo

4.1 Mechanical Dimensions



All dimensions are in millimeter

4.2 DUT Photo



Directions

1. The information marked “superscript #” is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
2. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
3. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
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**********END OF REPORT**********