




**ZHEJIANG WEIWEI OPTOELECTRONIC TECHNOLOGY CO., LTD**

# TEST REPORT

Prepared For:	ZHEJIANG WEIWEI OPTOELECTRONIC TECHNOLOGY CO., LTD NO.2 JinLi Road, Economic Development Zone, Haining City, Zhejiang
Product Name:	SMD 2835-6V150MA-RA80
Model:	SMD 2835-6V150MA-RA80
Prepared By:	Shenzhen BST Technology Co., Ltd. Building No.23-24, Zhiheng industrial park, Guankouer Road, Nantou, Nanshan District, Shenzhen, Guangdong, China.
Test Date:	Jun. 25, 2014 – Apr. 28, 2015
Date of Report:	Apr. 30, 2015
Report No.:	SHBST150420130035141427YSR-2

**TEST REPORT****LUMEN MAINTENANCE TESTING ACCORDING TO THE  
IESNA LM-80-08 TEST STANDARD**

<b>Testing laboratory</b> .....	: Shenzhen BST Technology Co., Ltd.
<b>Address</b> .....	: Building No.23-24, Zhiheng industrial park, Guankouer Road, Nantou, Nanshan District, Shenzhen, Guangdong, China.
<b>Testing location</b> .....	: Shenzhen BST Technology Co., Ltd.
<b>Applicant</b> .....	: ZHEJIANG WEIWEI OPTOELECTRONIC TECHNOLOGY CO., LTD
<b>Address</b> .....	: NO.2 JinLi Road, Economic Development Zone, Haining City, Zhejiang
<b>Test Procedure</b> .....	: The IESNA LM-80-2008: Measuring Lumen Maintenance of LED Light Sources.
<b>Non-standard test method</b> .....	: N.A.
<b>Type of test object</b> .....	: SMD 2835-6V150MA-RA80
<b>Trademark</b> .....	: COMELON
<b>Model/type reference</b> .....	: SMD 2835-6V150MA-RA80
<b>Rating</b> .....	: 6.0V  , 0.15A, 0.9W
<b>Manufacturer</b> .....	: ZHEJIANG WEIWEI OPTOELECTRONIC TECHNOLOGY CO., LTD
<b>Address</b> .....	: NO.2 JinLi Road, Economic Development Zone, Haining City, Zhejiang



Name and address of the testing laboratory:

**Shenzhen BST Technology Co., Ltd.**

**Building No.23-24, Zhiheng industrial park,**

**Guankouer Road, Nantou, Nanshan District,**  
**Shenzhen, Guangdong, China**

Prepared by :

Engineer

Reviewer :

Supervisor

Approved & Authorized Signer :

**Possible test case verdicts :**

Test case does not apply to the test object ..... : N(.A.)

Test object does meet the requirement ..... : P(ass)

Test object does not meet the requirement ..... : F(ail)

**General remarks:**

**Throughout this report a point is used as the decimal separator. The test results presented in this report relate only to the object tested.**

**Test Results Summary:**

Summary	I	II	III
Condition	T <sub>s</sub> =54.8 T <sub>A</sub> =53.6 R.H.<65% I=150mA	T <sub>s</sub> =84.8 T <sub>A</sub> =83.7 R.H.<65% I=150mA	T <sub>s</sub> =105.0 T <sub>A</sub> =104.8 R.H.<65% I=150mA
Duration(hour)	6000	6000	6000
Interval(hour)	0,1000,2000,3000,4000, 5000, 6000	0,1000,2000,3000,4000, 5000, 6000	0,1000,2000,3000,4000, 5000, 6000
Sample Size	20	20	20
Average Lumen Maintenance at 6000 hour	96.55%	95.22%	94.28%
Average Chromaticity Shift u'v' at 6000 hour	0.0019	0.0027	0.0036
Failure	0	0	0

**Equipments Used for Testing:**

Equipment	Model	Equipment No.
DC Power Supply	IT6122	BSTNX001
Power meter	WT210	BSTNX001
Spectroradiometer	SPEC300	BN067
0.3m Integrating Sphere	0.3m	BSTNX002

**Test Data:****Operating Condition: 55 /150mA**

No.	$\Phi$ (lm)	$V_F$ (V)	Lumen maintenance (%)					
	0h(Initial)		1000h	2000h	3000h	4000h	5000h	6000h
1	100	9.0	99.89	99.66	98.65	97.66	97.18	96.74
2	99	9.0	100.08	99.18	98.25	97.55	97.07	96.64
3	98	9.0	100.25	99.38	99.31	97.92	97.59	96.75
4	97	9.1	99.98	99.12	98.85	97.44	97.29	96.87
5	96	9.0	99.78	99.18	98.73	97.91	96.66	96.18
6	98	9.0	99.67	99.21	98.37	98.08	96.99	96.25
7	98	9.0	99.95	99.32	98.37	97.82	96.99	95.88
8	100	9.0	99.96	99.36	98.81	98.11	97.28	96.54
9	99	9.0	99.89	99.19	98.45	97.55	97.21	96.68
10	100	9.1	100.21	99.74	98.26	97.92	97.15	96.67
11	97	9.0	99.87	99.18	98.85	97.44	97.08	96.82
12	98	9.1	99.95	99.28	98.73	97.91	96.66	96.23
13	98	9.0	99.89	99.28	98.37	98.04	96.99	96.49
14	99	9.0	99.96	99.31	98.11	97.82	96.99	96.49
15	100	9.0	99.76	99.37	98.28	98.11	97.33	96.78
16	99	9.0	99.92	99.21	98.57	97.12	96.28	95.82
17	96	9.0	99.67	99.24	98.68	97.55	96.37	96.68
18	99	9.0	99.95	99.42	98.62	97.39	96.25	96.67
19	99	9.1	99.87	99.33	98.36	97.62	97.12	96.75
20	96	9.0	99.93	99.28	98.28	97.53	97.13	96.87
Average	98	9.0	99.92	99.31	98.55	97.72	96.98	96.55
Median	99	9.0	99.93	99.28	98.51	97.74	97.08	96.68
St, Dev.	1	0.0	0.15	0.16	0.29	0.28	0.36	0.33
Max	100	9.1	100.25	99.74	99.31	98.11	97.59	96.87
Min	96	9.0	99.67	99.12	98.11	97.12	96.25	95.82



Operating Condition: 85 /150mA

No.	$\Phi$ (lm)	$V_F$ (V)	Lumen maintenance (%)					
	0h(Initial)		1000h	2000h	3000h	4000h	5000h	6000h
1	96	9.1	99.88	99.12	98.23	97.28	96.85	95.39
2	99	9.1	99.69	99.18	98.26	97.33	97.07	95.28
3	96	9.0	100.18	99.23	98.63	97.52	97.12	95.21
4	97	9.1	99.98	99.12	98.85	97.44	96.33	95.08
5	99	9.0	99.82	99.18	98.62	97.39	96.66	95.29
6	98	9.1	99.87	99.21	98.37	97.62	96.28	95.33
7	101	9.0	99.95	99.18	98.37	97.18	96.29	95.22
8	98	9.0	99.96	99.25	98.62	97.39	96.39	95.18
9	99	9.1	99.89	99.19	98.45	97.55	97.21	95.08
10	96	9.0	99.98	99.33	98.54	97.52	97.15	95.12
11	97	9.0	99.89	99.18	98.39	97.44	97.08	95.33
12	96	9.1	99.88	99.28	98.73	97.34	97.12	95.24
13	98	9.0	99.85	99.25	98.56	97.85	96.85	95.36
14	100	9.1	99.96	99.31	98.26	97.82	96.78	95.18
15	100	9.0	99.92	99.32	98.28	97.65	96.85	95.17
16	97	9.0	99.92	99.21	98.33	97.12	96.28	95.23
17	99	9.1	99.85	99.24	98.34	97.33	96.37	95.36
18	101	9.0	99.95	99.26	98.35	97.39	96.25	95.17
19	99	9.0	99.87	99.33	98.36	97.54	96.28	95.12
20	100	9.0	99.93	99.28	98.28	97.53	96.54	95.08
Average	98	9.0	99.91	99.23	98.44	97.46	96.69	95.22
Median	99	9.0	99.91	99.24	98.37	97.44	96.72	95.22
St, Dev.	2	0.1	0.09	0.06	0.18	0.19	0.36	0.10
Max	101	9.1	100.18	99.33	98.85	97.85	97.21	95.39
Min	96	9.0	99.69	99.12	98.23	97.12	96.25	95.08



## Operating Condition: 105 /150mA

No.	$\Phi$ (lm)	$V_F$ (V)	Lumen maintenance (%)					
	0h(Initial)		1000h	2000h	3000h	4000h	5000h	6000h
1	97	9.1	99.89	99.08	98.56	97.33	95.88	94.12
2	97	9.0	99.77	99.18	98.64	97.28	96.29	94.33
3	100	9.0	99.69	99.34	98.33	97.51	96.34	94.25
4	98	9.0	99.88	98.96	98.25	97.34	96.33	94.36
5	96	9.0	99.85	99.52	97.98	97.28	95.85	94.28
6	97	9.0	99.87	99.21	98.12	97.66	95.58	94.39
7	102	9.1	99.92	99.25	98.33	97.55	95.39	94.15
8	100	9.0	99.96	99.25	98.08	97.74	95.28	94.18
9	99	9.0	99.91	99.36	98.26	97.58	96.28	94.33
10	98	9.0	99.92	99.33	98.39	97.52	96.33	94.28
11	102	9.0	99.89	99.34	98.18	97.33	96.85	94.39
12	101	9.0	100.08	99.37	98.54	97.28	96.84	94.27
13	98	9.0	99.85	99.18	98.66	97.66	96.85	94.18
14	102	9.1	99.96	99.09	98.71	97.69	96.71	94.31
15	100	9.0	99.77	99.09	98.75	97.81	96.85	95.02
16	97	9.0	100.05	99.21	98.84	97.89	96.74	94.28
17	96	9.0	99.92	99.18	98.29	97.66	96.52	93.88
18	98	9.0	99.95	99.21	98.39	97.54	96.18	94.25
19	103	9.0	99.88	99.18	97.88	97.15	96.28	94.61
20	96	9.0	99.93	99.28	98.42	97.34	96.45	93.66
Average	99	9.0	99.90	99.23	98.38	97.51	96.29	94.28
Median	98	9.0	99.90	99.21	98.36	97.53	96.33	94.28
St. Dev.	2	0.0	0.09	0.13	0.26	0.21	0.48	0.26
Max	103	9.1	100.08	99.52	98.84	97.89	96.85	95.02
Min	96	9.0	99.69	98.96	97.88	97.15	95.28	93.66



Operating Condition: 55 /150mA

No.	Ra	Chromaticity Shift u'v'					
	0h(Initial)	1000h	2000h	3000h	4000h	5000h	6000h
1	80.9	0.0006	0.0010	0.0013	0.0016	0.0018	0.0020
2	80.8	0.0007	0.0011	0.0012	0.0014	0.0016	0.0018
3	81.0	0.0007	0.0011	0.0013	0.0016	0.0020	0.0021
4	81.0	0.0007	0.0010	0.0012	0.0016	0.0019	0.0020
5	81.2	0.0007	0.0011	0.0013	0.0015	0.0019	0.0020
6	81.0	0.0006	0.0011	0.0013	0.0015	0.0017	0.0019
7	80.8	0.0007	0.0010	0.0013	0.0015	0.0016	0.0018
8	81.3	0.0007	0.0011	0.0013	0.0017	0.0019	0.0020
9	81.0	0.0006	0.0011	0.0013	0.0015	0.0018	0.0019
10	81.3	0.0007	0.0011	0.0013	0.0016	0.0017	0.0019
11	81.0	0.0007	0.0010	0.0012	0.0014	0.0016	0.0018
12	81.2	0.0007	0.0011	0.0014	0.0017	0.0020	0.0021
13	80.8	0.0007	0.0010	0.0012	0.0016	0.0019	0.0021
14	81.9	0.0007	0.0011	0.0014	0.0016	0.0018	0.0019
15	80.9	0.0006	0.0011	0.0013	0.0016	0.0019	0.0021
16	81.0	0.0007	0.0011	0.0013	0.0015	0.0018	0.0019
17	81.0	0.0007	0.0011	0.0014	0.0017	0.0018	0.0020
18	81.2	0.0007	0.0011	0.0013	0.0015	0.0017	0.0018
19	81.0	0.0006	0.0011	0.0013	0.0016	0.0019	0.0020
20	81.2	0.0007	0.0010	0.0012	0.0014	0.0016	0.0018
Average	81.1	0.0007	0.0011	0.0013	0.0016	0.0018	0.0019
Median	81.0	0.0007	0.0011	0.0013	0.0016	0.0018	0.0020
St. Dev.	0.2	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
Max	81.9	0.0007	0.0011	0.0014	0.0017	0.0020	0.0021
Min	80.8	0.0006	0.0010	0.0012	0.0014	0.0016	0.0018



**Operating Condition: 85 /150mA**

No.	Ra	Chromaticity Shift u'v'					
	0h(Initial)	1000h	2000h	3000h	4000h	5000h	6000h
1	81.2	0.0007	0.0012	0.0014	0.0018	0.0022	0.0028
2	81.0	0.0007	0.0011	0.0012	0.0016	0.0020	0.0027
3	81.0	0.0007	0.0011	0.0013	0.0016	0.0020	0.0026
4	81.0	0.0007	0.0012	0.0014	0.0016	0.0019	0.0026
5	80.8	0.0007	0.0011	0.0013	0.0015	0.0019	0.0027
6	80.7	0.0006	0.0011	0.0014	0.0017	0.0019	0.0028
7	80.8	0.0007	0.0011	0.0013	0.0015	0.0019	0.0027
8	80.8	0.0007	0.0011	0.0014	0.0017	0.0019	0.0026
9	81.0	0.0008	0.0011	0.0013	0.0015	0.0018	0.0026
10	81.3	0.0007	0.0012	0.0015	0.0016	0.0019	0.0026
11	81.0	0.0007	0.0012	0.0014	0.0017	0.0020	0.0027
12	80.8	0.0007	0.0011	0.0014	0.0017	0.0020	0.0028
13	80.8	0.0007	0.0012	0.0016	0.0019	0.0023	0.0028
14	81.0	0.0007	0.0011	0.0014	0.0018	0.0020	0.0027
15	80.9	0.0008	0.0011	0.0013	0.0016	0.0019	0.0027
16	81.1	0.0007	0.0011	0.0015	0.0019	0.0022	0.0029
17	81.0	0.0007	0.0011	0.0014	0.0017	0.0021	0.0027
18	81.0	0.0007	0.0011	0.0014	0.0018	0.0021	0.0027
19	81.0	0.0008	0.0011	0.0013	0.0016	0.0019	0.0026
20	81.2	0.0007	0.0012	0.0015	0.0019	0.0022	0.0029
Average	81.0	0.0007	0.0011	0.0014	0.0017	0.0020	0.0027
Median	81.0	0.0007	0.0011	0.0014	0.0017	0.0020	0.0027
St, Dev.	0.2	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
Max	81.3	0.0008	0.0012	0.0016	0.0019	0.0023	0.0029
Min	80.7	0.0006	0.0011	0.0012	0.0015	0.0018	0.0026



## Operating Condition: 105 /150mA

No.	Ra	Chromaticity Shift u'v'					
	0h(Initial)	1000h	2000h	3000h	4000h	5000h	6000h
1	81.2	0.0011	0.0014	0.0018	0.0023	0.0027	0.0037
2	81.0	0.0012	0.0015	0.0019	0.0024	0.0028	0.0035
3	81.0	0.0011	0.0014	0.0017	0.0024	0.0028	0.0036
4	81.2	0.0011	0.0015	0.0019	0.0025	0.0026	0.0036
5	81.2	0.0011	0.0015	0.0018	0.0025	0.0026	0.0037
6	81.0	0.0009	0.0013	0.0018	0.0025	0.0028	0.0038
7	80.8	0.0011	0.0015	0.0019	0.0024	0.0028	0.0036
8	80.9	0.0011	0.0014	0.0018	0.0025	0.0029	0.0037
9	81.0	0.0011	0.0015	0.0019	0.0025	0.0028	0.0034
10	81.0	0.0012	0.0015	0.0019	0.0025	0.0028	0.0035
11	81.0	0.0009	0.0014	0.0018	0.0024	0.0026	0.0034
12	81.3	0.0010	0.0015	0.0018	0.0025	0.0029	0.0036
13	81.0	0.0011	0.0014	0.0018	0.0023	0.0028	0.0035
14	81.5	0.0011	0.0014	0.0019	0.0024	0.0028	0.0034
15	80.9	0.0012	0.0015	0.0017	0.0025	0.0028	0.0035
16	81.0	0.0011	0.0015	0.0018	0.0025	0.0027	0.0036
17	80.8	0.0011	0.0015	0.0019	0.0025	0.0028	0.0034
18	81.2	0.0011	0.0015	0.0018	0.0023	0.0027	0.0034
19	81.0	0.0012	0.0015	0.0018	0.0025	0.0029	0.0036
20	81.3	0.0011	0.0014	0.0017	0.0024	0.0028	0.0035
Average	81.1	0.0011	0.0015	0.0018	0.0024	0.0028	0.0036
Median	81.0	0.0011	0.0015	0.0018	0.0025	0.0028	0.0036
St. Dev.	0.2	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Max	81.5	0.0012	0.0015	0.0019	0.0025	0.0029	0.0038
Min	80.8	0.0009	0.0013	0.0017	0.0023	0.0026	0.0034

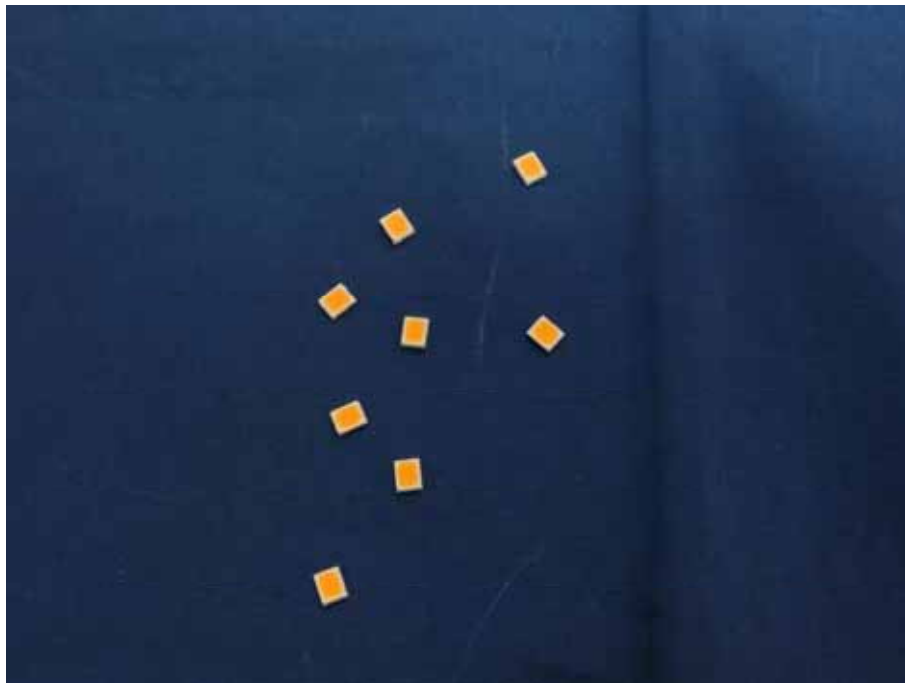


## **ANNEX A:**

### **Photo-documentation**



**Photo 1 General Appearance of the EUT**



**##### END OF THE REPORT #####**