

报告编号: GZES200101035832

签发日期: 2020-01-13

以下样品由客户提交确认:

申请方: 四川蓝景光电技术有限责任公司

申请方地址: 成都市双流区西南航空港经济开发区空港二路二段1000号

制造商: 与申请方一致制造商地址: 与申请方一致

检测机构: 通标标准技术服务有限公司广州分公司

地址: 广东省广州市经济技术开发区科学城科珠路 198 号

测试标准: IES LM-79-08

测试样品描述: 2835 注塑防水模组

商标/品牌: —

型号名称: ST2-HD

额定参数: 12 V DC; 60 mA; 0.72 W; 6500 K

测试结果: 见第 4 页至第 8 页(CES CV)

备注: 测量已考虑不确定度

Alex Tan

Alex Tan ⊞æ Justin Xie

hisain die

主检

中国·广州·经济技术开发区科学城科珠路198号



邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



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N/A  测试概述: 测试样品在恒定的 12 伏直流电下测试,测量光分布、总光通量、光效、CCT 和显色指数。  测试样品特殊描述
测试概述: 测试样品在恒定的 12 伏直流电下测试,测量光分布、总光通量、光效、CCT 和显色指数。 测试样品特殊描述 灯头规格 一 光源描述 — 额定环境温度 25 ℃ 防尘、防固体异物和防水等级 —
测试样品在恒定的 <b>12</b> 伏直流电下测试,测量光分布、总光通量、光效、 <b>CCT</b> 和显色指数。 <b>测试样品特殊描述</b>
<b>测试样品特殊描述</b>
灯头规格       —         光源描述       —         额定环境温度       25 °C         防尘、防固体异物和防水等级       —
灯头规格       —         光源描述       —         额定环境温度       25 °C         防尘、防固体异物和防水等级       —
光源描述
额定环境温度
防尘、防固体异物和防水等级
- Charles Branchista
可能的试验情况判定:
-试验情况不适用本试验产品 N/A (not applicable)
-试验样品满足要求 P (Pass)
-试验样品不满足要求 F (Fail)
Testing
收样日期 2020.01.07
测试日期 2020.01.07 - 2020.01.13
产品描述:
LED 模组.



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#### 1 测试条件

LED 照明产品不做老化,待测样品发光面朝下,达到稳定之后进行即进行测量。测量期间的环境温度为25℃±1℃。

用已校准的 C型 Gonio 光度计测量总光通量和光分布,光度距离为 7.30 m。

颜色特性由经校准的 2m 积分球系统用 4π 几何系统测量,该系统由一个积分球,分光辐射仪和软件组成。测量在 380 至 780 nm 光波范围内,至少间隔 5 nm 测量。积分球涂层反射率为 98%。



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## 2 测试结果

光效:

I) 光通量,光效和配光

测试电压: 12 V DC 输入电流: 0.0606 A 总运行时间: 98 min 稳定时间 33 min 功率: 0.7272 W 总光通量: 65.76 Im

光束角: H: 148.6°; V: 148.8°

90.4 lm/W

### 区域光通量

γ( °)	Zone	γ( °)	Zone
	lumens		lumens
0-10	1.30	90-100	0.00
10-20	3.99	100-110	0.00
20-30	6.81	110-120	0.00
30-40	9.57	120-130	0.00
40-50	11.92	130-140	0.00
50-60	13.13	140-150	0.00
60-70	11.99	150-160	0.00
70-80	6.46	160-170	0.00
80-90	0.59	170-180	0.00

γ( °)	Zone	% Lamp	γ( °)	Zone	% Lamp
	lumens			lumen	
0-30	12.10	18.40%	90-120	0.00	0.00%
0-40	21.67	32.96%	90-130	0.00	0.00%
0-60	46.72	71.05%	90-120	0.00	0.00%
0-90	65.76	100.00%	90-150	0.00	0.00%
0-120	65.76	100.00%	90-120	0.00	0.00%
0-180	65.76	100.00%	90-180	0.00	0.00%
60-90	19.04	28.95%	0-64.63	52.61	80.00%

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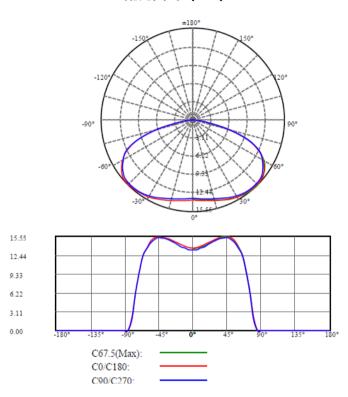
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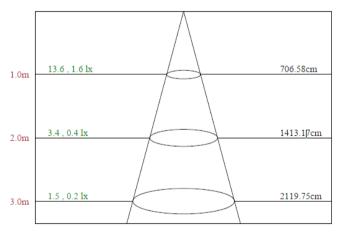
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#### 配光曲线 (cd)



#### 等照度曲线



Beam angle of C67.5 plane 148.39 Max , Ave

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光强分布(	(cd)
ノしコ出ノノコレー	(Cu)

C/y(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	13.58	13.69	13.87	14.16	14.45	14.77	15.09	15.26	15.35
22.5	13.52	13.58	13.78	14.06	14.39	14.68	14.98	15.17	15.36
45.0	13.46	13.55	13.75	14.00	14.37	14.71	15.03	15.26	15.46
67.5	13.49	13.58	13.79	14.04	14.40	14.82	15.10	15.35	15.51
90.0	13.29	13.37	13.58	13.84	14.16	14.56	14.85	15.14	15.29
112.5	13.49	13.58	13.79	14.04	14.40	14.82	15.10	15.35	15.51
135.0	13.46	13.55	13.75	14.00	14.37	14.71	15.03	15.26	15.46
157.5	13.52	13.58	13.78	14.06	14.39	14.68	14.98	15.17	15.36
180.0	13.58	13.69	13.87	14.16	14.45	14.77	15.09	15.26	15.35
202.5	13.52	13.58	13.78	14.06	14.39	14.68	14.98	15.17	15.36
225.0	13.46	13.55	13.75	14.00	14.37	14.71	15.03	15.26	15.46
247.5	13.49	13.58	13.79	14.04	14.40	14.82	15.10	15.35	15.51
270.0	13.29	13.37	13.58	13.84	14.16	14.56	14.85	15.14	15.29
292.5	13.49	13.58	13.79	14.04	14.40	14.82	15.10	15.35	15.51
315.0	13.46	13.55	13.75	14.00	14.37	14.71	15.03	15.26	15.46
337.5	13.52	13.58	13.78	14.06	14.39	14.68	14.98	15.17	15.36
360.0	13.58	13.69	13.87	14.16	14.45	14.77	15.09	15.26	15.35
300.0	13.30	13.09	13.67	14.10	14.45	14.77	13.09	13.20	15.55
C/y(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	15.43	15.35	14.74	13.72	12.33	9.92	6.27	2.29	0.00
22.5	15.42	15.26	14.80	13.82	12.33	9.86	6.22	2.32	0.00
45.0	15.43	15.22	14.80	13.82	12.29	9.81	6.27	2.39	0.00
67.5	15.55	15.32	14.82	13.92	12.37	9.97	6.18	1.90	0.00
90.0	15.32	15.11	14.53	13.66	12.45	9.92	6.18	1.92	0.00
			14.55						
112.5	15.55	15.32	14.82	13.92	12.37	9.97	6.18	1.90	0.00
135.0	15.43	15.22	14.80	13.82	12.29	9.81	6.27	2.39	0.00
157.5	15.42	15.26	14.80	13.82	12.33	9.86	6.22	2.32	0.00
180.0	15.43	15.35	14.74	13.72	12.33	9.92	6.27	2.29	0.00
202.5	15.42	15.26	14.80	13.82	12.33	9.86	6.22	2.32	0.00
225.0	15.43	15.22	14.80	13.82	12.29	9.81	6.27	2.39	0.00
247.5	15.55	15.32	14.82	13.92	12.37	9.97	6.18	1.90	0.00
270.0	15.32	15.11	14.53	13.66	12.45	9.92	6.18	1.92	0.00
292.5	15.55	15.32	14.82	13.92	12.37	9.97	6.18	1.90	0.00
315.0	15.43	15.22	14.80	13.82	12.29	9.81	6.27	2.39	0.00
337.5	15.42	15.26	14.80	13.82	12.33	9.86	6.22	2.32	0.00
360.0	15.43	15.35	14.74	13.72	12.33	9.92	6.27	2.29	0.00
C/y(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0									
202.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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C/y(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C/y(°)	180.0
0.0	0.00
22.5	0.00
45.0	0.00
67.5	0.00
90.0	0.00
112.5	0.00
135.0	0.00
157.5	0.00
180.0	0.00
202.5	0.00
225.0	0.00
247.5	0.00
270.0	0.00
292.5	0.00
315.0	0.00
337.5	0.00
360.0	0.00



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#### 颜色特性 II)

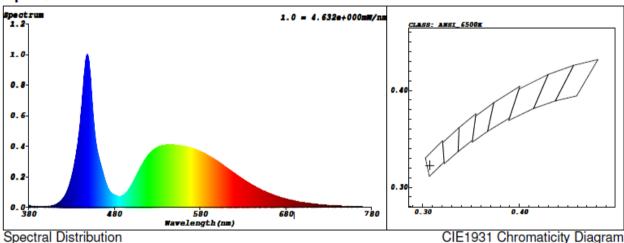
测试电压: 12 V DC 输入电流: 0.0606 A 总运行时间: 70 min 稳定时间 63 min 功率: 0.7272 W

色品坐标: x=0.3182; y=0.3358

u'=0.1991; v'=0.4727

3.98 x 10<sup>-3</sup> Duv: 相关色温: 6180 K 一般显色指数 Ra: 82.4 R9: 6

## Spectrum



CIE1931 Chromaticity Diagram



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#### 3 标准灯信息

型 <del>号</del>	D204H
标准灯类型	全方向灯
校准电流(A)	5,0250
参考电压 (V)	26,5
校准相关色温 (K)	3217
校准光通量 (lm)	3000





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#### 4 试验仪器设备清单

设备编号	仪器名称	校准有效期至
GZE003-16	交流/直流电源	2020/6/13
GZE006-79	数字电参数测量仪	2020/4/7
GZE126-12	精密数显直流稳流稳 压电源(30V/5A)	2020/10/25
GZE126-13	数字功率计(0.15 级)	2020/10/30
GZE126-14	智能交流测试专用电源 1kVA	2020/10/25
GZE126-24	通用标准光源	2020/6/25
GZE126-8	高精度快速光谱辐射 计(380nm -780nm)	2020/10/29
GZE126-9	积分球	2022/12/29
GZE129-1	分布光度计测试系统	2020/6/28
GZE012-54	真有效值数字万用表	2020/2/25



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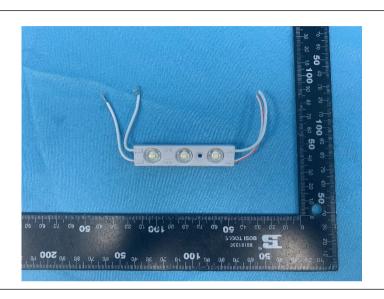


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- - - 报告结尾- - -

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