



Report No.:GZE151038-01S

NVLAP LAB CODE 201011-0

## LM-79-08 Test Report

For

**SIMKAR CORPORATION**

(Brand Name: )

## LED Lamp

Model name(s): SALXS450U1

Model differences: N/A

Test & Report By:

*Johnson Sun*

Engineer: Johnson Sun

Date: Oct.26, 2015



Review By:

*Tommy Liang*

Manager: Tommy Liang

Note: This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Laboratory: Standard-Tech Co. Ltd Testing Center

NVLAP CODE: 201011-0

Report Format Number STD/QR4909-A/2

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U.S. Department of Energy

**Lighting Facts™ Uniform LM-79 Reporting Template**
**Laboratory Information:**

Name of Test Laboratory	Standard-Tech Co., Ltd.
Date of Test Report	Oct.26, 2015
Test Report No.	GZE151038-01S
Laboratory Contact Name	Tommy Liang

**Product Information:**

Organization Name	SIMKAR CORPORATION	
Brand Name		
Model Number	SALXS450U1	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	LED Lamp	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

**Goniophotometer**
**Electrical Measurements:**
**Output**

Input Wattage	72.75	W
Input Current	0.2984	A
Input Voltage (ac)	277.2	V
Power Factor	0.8798	
Off-State Power	0	W

**Photometric Characteristics**

Total Initial Lumen Output	9066.0	lm
Initial Lumen Efficacy	124.61	lm/w
Correlated color temperature / CCT	--	K
Color rendering index / CRI	--	
R9 Value	--	
Duv	--	
<b>Luminous Intensity Distribution</b>		
Center beam candlepower (if applicable)	1726	cd
Beam angle (if applicable)	55.2	°
Zonal lumens in the 0°-60° zone	61.6	%
Zonal lumens in the 60°-90° zone	38.4	%
Zonal lumens in the 90°-120° zone	0	%
Zonal lumens in the 120°-180° zone	0	%

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Test Specifications:	
Date of Receipt	: Oct.21,2015
Date of Test	: Oct.22,2015
Test item	: Total Luminous Flux, Luminous Distribution Intensity, Luminous Efficacy, Electrical parameters
Reference Standard	IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	QD25

### Test Methods

#### 1. Photometric and Electrical measurements – Light Distribution Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at  $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ , measured at a point not more than 1 m from the sample and at the same height as the sample. The sample was operated at 277Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at  $1^{\circ}$  vertical intervals and  $22.5^{\circ}$  horizontal intervals.

**1. Product Information:**

Brand Name	<b>SIMKAR</b> CORPORATION
Model Number	SALXS450U1
Luminaire Type	LED Lamp
Rated Voltage / Frequency	277Vac, 60Hz
Nominal Power	85W
Rated Initial Lamp Lumen	N/A
Declared CCT	5000K
IES	Type IV - Medium
LED Manufacturer	NICHIA
LED Model	219C D320 5000K RA70
Power Supply:	EUG-075S175DT 120-277V
Sample Receipt Date	Oct.21,2015
Sample Number	GZE151038-01S1

**Photo**



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<b>2.1 Electrical, Photometric and Chromaticity Measurements</b> (Refer to Work Instruction QD25)	<b>IES LM-79 2008</b>
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<b>Test date</b>	2015-10-22	<b>Test Ambient:</b>	25.1°C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	SALXS450U1		

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE151038-01S1	277.2	60	0.2984	72.75	0.8798	17.62

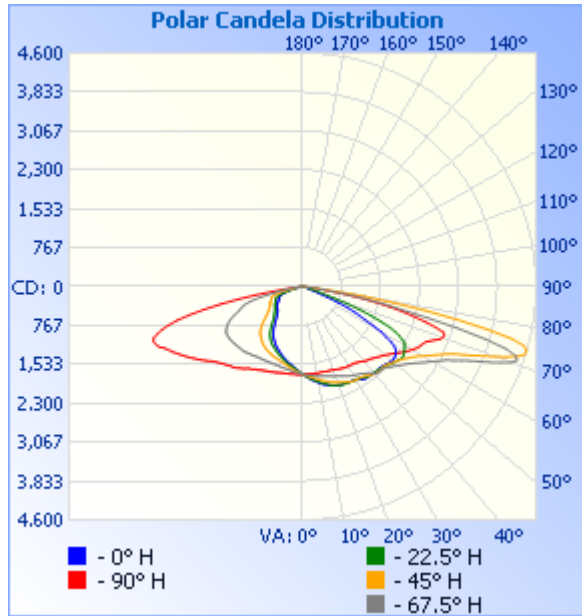
**Goniophotometer Method:**

Parameter	Result
Test Voltage (V)	277.0
Frequency (Hz)	60
Total Luminous (lm)	9066.0
Luminous Efficacy (lm/W)	124.61
Beam Angle°	55.2
Center Beam Candle Power (cd)	1726

**Zonal Lumen Tabulation:**

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-5	41.3	0.5%	90-95	0	0%
5-10	123.5	1.4%	95-100	0	0%
10-15	205.3	2.3%	100-105	0	0%
15-20	286.7	3.2%	105-110	0	0%
20-25	366.5	4.0%	110-115	0	0%
25-30	443.8	4.9%	115-120	0	0%
30-35	516.9	5.7%	120-125	0	0%
35-40	587.1	6.5%	125-130	0	0%
40-45	652.1	7.2%	130-135	0	0%
45-50	714.6	7.9%	135-140	0	0%
50-55	787.1	8.7%	140-145	0	0%
55-60	860.0	9.5%	145-150	0	0%
60-65	911.7	10.1%	150-155	0	0%
65-70	943.8	10.4%	155-160	0	0%
70-75	920.9	10.2%	160-165	0	0%
75-80	565.5	6.2%	165-170	0	0%
80-85	130.7	1.4%	170-175	0	0%
85-90	6.5	0.1%	175-180	0	0%

### Photometric Data



Flood Summary				
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	98.2%	8,902.6	68	150
Beam (50%):	41.2%	3,735.5	25.4	55.2
<b>Total:</b>	<b>100%</b>	<b>9,061.0</b>		

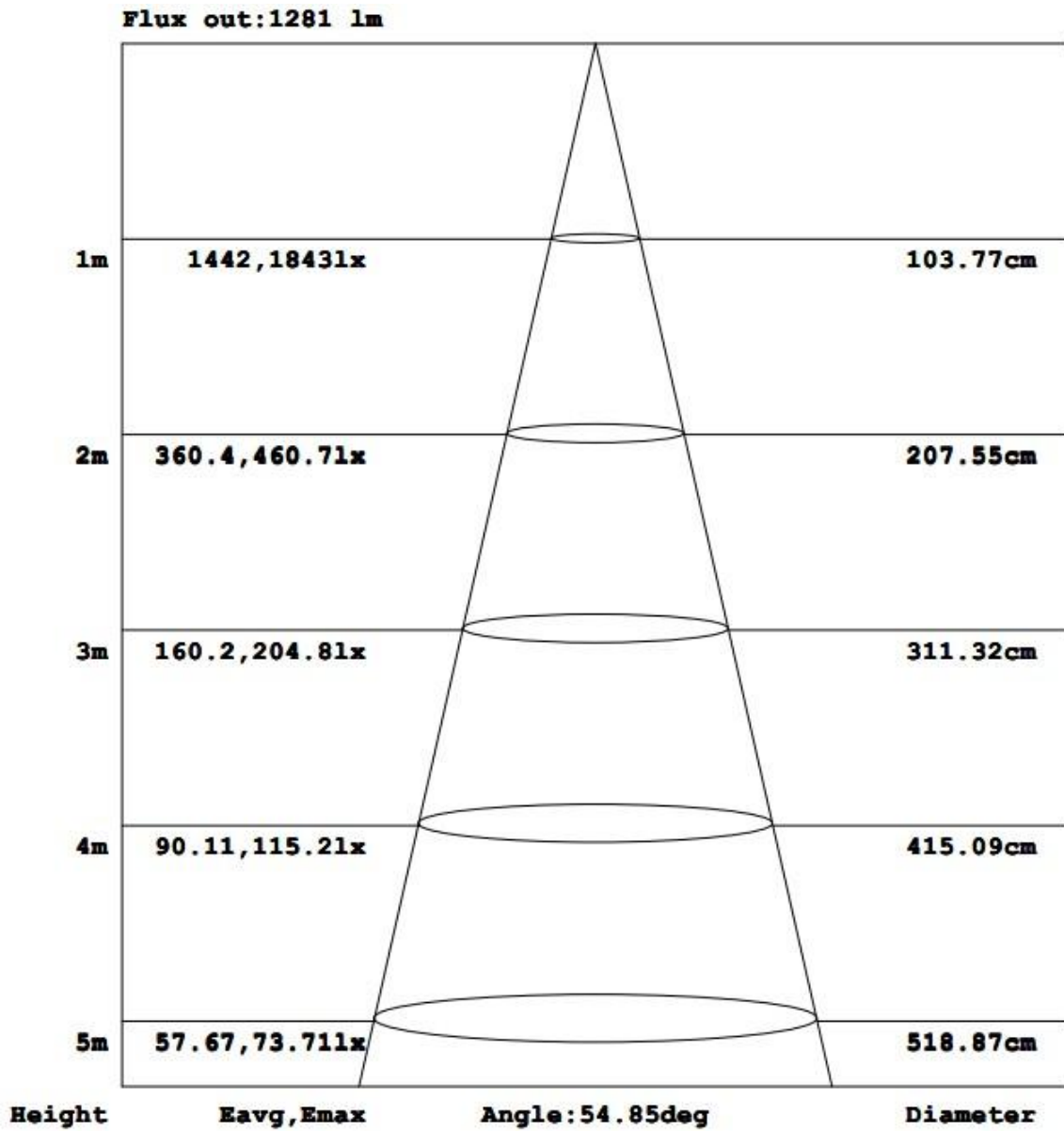
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**Illuminance Plots**



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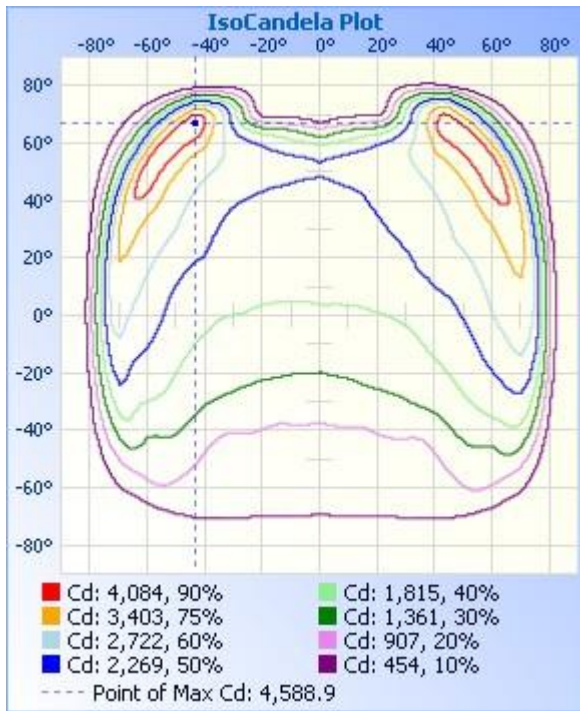
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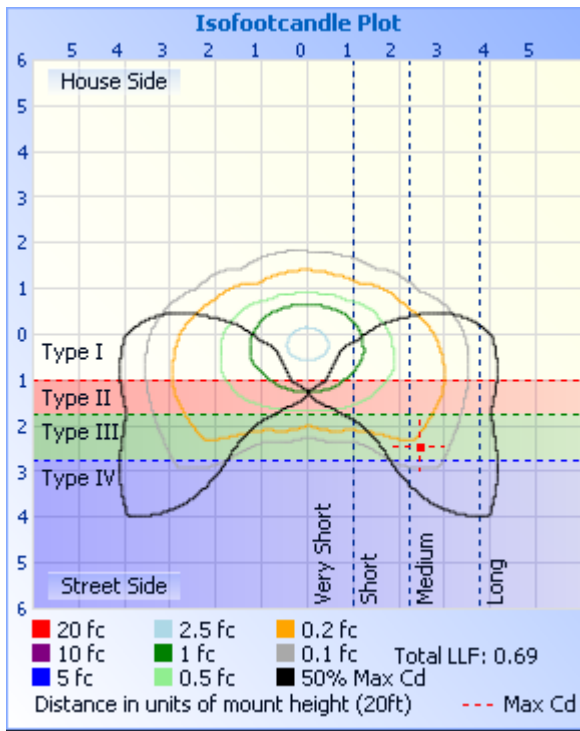
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### ISOCANDELA DIAGRAM



### ISOLUX DIAGRAM



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**Candela Table - Type C**

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	1726	1726	1726	1726	1726	1726	1726	1726	1726	1726	1726	1726	1726	1726	1726	1726	1726
1	1746	1745	1740	1731	1724	1715	1711	1705	1703	1708	1714	1722	1729	1731	1736	1745	1746
2	1765	1764	1749	1740	1723	1708	1699	1685	1681	1688	1703	1714	1735	1749	1753	1769	1765
3	1790	1783	1763	1745	1725	1698	1677	1665	1659	1668	1689	1706	1738	1756	1769	1790	1790
4	1808	1798	1774	1748	1729	1686	1663	1647	1643	1652	1677	1698	1732	1764	1785	1812	1808
5	1831	1819	1787	1759	1727	1678	1646	1629	1620	1632	1662	1690	1734	1774	1798	1832	1831
6	1852	1833	1801	1762	1726	1663	1634	1607	1599	1616	1648	1684	1733	1778	1814	1854	1852
7	1867	1850	1815	1774	1723	1653	1616	1588	1578	1600	1634	1679	1734	1788	1820	1870	1867
8	1890	1872	1831	1782	1727	1646	1601	1569	1559	1584	1618	1672	1738	1801	1837	1889	1890
9	1908	1887	1845	1785	1726	1638	1589	1551	1543	1570	1607	1663	1739	1808	1852	1902	1908
10	1928	1908	1862	1790	1727	1630	1574	1533	1529	1556	1597	1656	1734	1813	1869	1930	1928
11	1947	1928	1876	1798	1725	1619	1564	1517	1514	1542	1584	1652	1743	1822	1886	1944	1947
12	1970	1941	1893	1806	1725	1611	1554	1498	1496	1524	1569	1651	1738	1827	1897	1967	1970
13	1981	1960	1905	1810	1723	1606	1540	1483	1477	1512	1562	1642	1745	1844	1921	1981	1981
14	1994	1980	1923	1816	1725	1602	1531	1471	1459	1497	1552	1641	1748	1857	1937	1998	1994
15	2012	2000	1939	1827	1728	1593	1517	1452	1442	1481	1539	1637	1756	1873	1956	2008	2012
16	2022	2016	1953	1837	1735	1591	1507	1438	1425	1462	1529	1636	1760	1883	1972	2024	2022
17	2039	2026	1965	1846	1736	1584	1501	1425	1404	1448	1521	1629	1768	1901	1988	2039	2039
18	2045	2037	1980	1854	1737	1574	1487	1407	1384	1429	1518	1630	1777	1912	2011	2054	2045
19	2055	2047	1994	1869	1740	1569	1478	1392	1366	1418	1507	1627	1779	1920	2024	2068	2055
20	2065	2064	2010	1877	1745	1568	1468	1380	1348	1400	1504	1627	1788	1938	2041	2084	2065
21	2075	2074	2016	1884	1751	1567	1457	1363	1330	1387	1498	1626	1795	1949	2063	2088	2075
22	2079	2081	2030	1893	1758	1561	1449	1345	1313	1373	1490	1626	1803	1963	2079	2089	2079
23	2079	2088	2038	1915	1767	1562	1436	1331	1295	1355	1484	1625	1804	1982	2092	2105	2079
24	2084	2093	2060	1928	1773	1562	1425	1310	1276	1340	1476	1629	1814	1996	2108	2112	2084
25	2082	2095	2076	1945	1779	1563	1416	1297	1258	1325	1470	1627	1822	2012	2135	2116	2082
26	2088	2101	2088	1957	1785	1569	1404	1275	1237	1308	1460	1631	1833	2030	2153	2121	2088
27	2089	2099	2097	1975	1797	1568	1392	1261	1217	1294	1456	1632	1843	2047	2161	2124	2089
28	2097	2107	2106	1989	1803	1568	1383	1243	1194	1279	1444	1634	1856	2061	2172	2132	2097
29	2107	2110	2118	2003	1803	1569	1371	1223	1170	1263	1433	1637	1871	2079	2189	2138	2107

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30	2118	2111	2118	2012	1804	1566	1363	1202	1143	1242	1424	1638	1873	2086	2193	2151	2118
31	2135	2120	2121	2028	1812	1560	1352	1179	1116	1222	1412	1642	1901	2109	2202	2154	2135
32	2154	2123	2128	2043	1809	1560	1342	1155	1086	1198	1402	1644	1916	2136	2211	2166	2154
33	2176	2144	2132	2055	1816	1563	1329	1125	1054	1173	1393	1647	1923	2161	2219	2174	2176
34	2191	2164	2133	2064	1818	1563	1318	1099	1021	1144	1380	1653	1939	2190	2224	2199	2191
35	2198	2180	2150	2089	1830	1560	1308	1067	984	1113	1365	1663	1971	2211	2224	2218	2198
36	2194	2191	2170	2111	1846	1563	1292	1031	944	1080	1351	1670	1997	2242	2245	2225	2194
37	2195	2196	2189	2135	1857	1571	1272	996	904	1043	1336	1678	2015	2267	2268	2228	2195
38	2199	2200	2204	2153	1871	1576	1256	956	867	1006	1315	1683	2037	2300	2284	2232	2199
39	2210	2202	2219	2195	1893	1580	1239	918	834	968	1299	1695	2061	2329	2296	2236	2210
40	2216	2204	2230	2239	1911	1584	1219	881	804	929	1284	1700	2079	2362	2306	2238	2216
41	2210	2209	2238	2248	1927	1589	1199	849	779	895	1266	1710	2100	2415	2320	2249	2210
42	2208	2214	2249	2259	1937	1596	1175	820	757	865	1242	1721	2107	2455	2343	2254	2208
43	2209	2218	2247	2259	1948	1599	1148	794	735	836	1224	1725	2126	2478	2380	2259	2209
44	2211	2230	2242	2260	1967	1600	1121	771	717	812	1193	1726	2148	2485	2402	2261	2211
45	2222	2238	2243	2271	1990	1605	1090	748	697	788	1161	1729	2165	2496	2418	2280	2222
46	2228	2248	2251	2292	2009	1609	1055	730	680	771	1128	1733	2187	2524	2423	2297	2228
47	2243	2265	2260	2325	2030	1617	1020	713	668	753	1088	1737	2209	2547	2433	2311	2243
48	2261	2282	2280	2359	2057	1626	982	698	661	739	1047	1739	2236	2575	2451	2329	2261
49	2274	2319	2296	2385	2076	1621	947	685	662	722	1004	1744	2260	2607	2465	2347	2274
50	2285	2335	2323	2425	2101	1631	916	672	659	709	963	1749	2294	2642	2476	2370	2285
51	2291	2353	2346	2456	2132	1633	891	660	650	700	927	1754	2331	2682	2501	2399	2291
52	2290	2368	2371	2498	2168	1638	864	653	640	690	895	1757	2374	2717	2530	2409	2290
53	2283	2387	2399	2537	2198	1640	841	642	636	681	865	1762	2416	2755	2559	2419	2283
54	2265	2405	2430	2585	2236	1643	822	634	632	672	842	1767	2456	2817	2591	2423	2265
55	2247	2412	2468	2636	2281	1654	807	623	622	664	818	1768	2502	2870	2622	2433	2247
56	2212	2403	2516	2690	2324	1661	790	616	592	655	800	1769	2541	2923	2660	2435	2212
57	2154	2387	2552	2752	2362	1654	774	610	582	648	781	1765	2586	2991	2707	2428	2154
58	2052	2362	2604	2818	2404	1641	759	604	574	642	766	1768	2629	3049	2765	2409	2052
59	1915	2347	2657	2884	2452	1634	748	596	560	634	752	1757	2672	3106	2831	2399	1915
60	1796	2324	2730	2945	2483	1620	738	585	547	622	741	1740	2714	3161	2902	2365	1796
61	1593	2300	2809	3025	2525	1598	731	572	539	613	730	1717	2761	3217	2974	2326	1593

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62	1397	2226	2886	3102	2564	1564	723	567	530	608	721	1694	2798	3291	3059	2256	1397
63	1255	2136	2957	3184	2587	1530	712	568	522	604	715	1666	2850	3395	3135	2155	1255
64	1132	2035	3048	3318	2609	1493	703	566	511	596	709	1633	2891	3499	3248	2052	1132
65	988	1890	3140	3453	2638	1440	698	557	503	586	697	1588	2933	3603	3353	1892	988
66	781	1691	3250	3589	2668	1383	686	549	498	573	685	1537	2977	3789	3458	1690	781
67	547	1479	3436	3764	2736	1327	678	543	488	560	672	1480	3051	3975	3562	1479	547
68	338	1231	3621	3978	2806	1270	677	531	475	541	665	1412	3095	4144	3715	1258	338
69	247	956	3807	4185	2897	1226	668	513	454	517	663	1358	3119	4313	3893	1013	247
70	205	665	4030	4363	2936	1198	660	483	430	480	656	1313	3132	4428	4100	740	205
71	175	431	4247	4466	2953	1167	646	451	399	448	642	1271	3104	4462	4303	496	175
72	152	303	4446	4414	2924	1137	622	414	342	414	614	1237	3011	4403	4403	344	152
73	133	242	4574	4203	2744	1088	593	347	310	347	582	1182	2897	4252	4494	263	133
74	115	206	4589	3744	2525	1015	548	306	280	296	538	1097	2750	3942	4519	216	115
75	100	175	4523	3151	2280	885	498	269	247	259	488	986	2557	3469	4469	181	100
76	87	147	4259	2531	2051	716	424	230	209	221	434	845	2296	2868	4290	152	87
77	75	122	3725	1990	1772	586	308	190	172	183	333	692	1997	2278	3946	126	75
78	64	99	3094	1625	1458	491	253	154	132	149	248	561	1652	1746	3473	102	64
79	53	79	2468	1265	1136	408	202	119	106	118	201	462	1288	1388	2857	82	53
80	43	64	1808	905	828	328	141	96	90	94	155	372	939	1032	2221	66	43
81	32	52	1254	618	521	257	102	74	73	76	113	291	600	731	1633	53	32
82	21	36	703	424	350	180	79	54	61	55	85	212	368	483	1047	38	21
83	12	21	283	282	220	116	61	40	33	41	68	138	234	323	460	24	12
84	5	10	134	177	118	84	42	21	12	25	47	96	135	209	176	12	5
85	1	2	57	101	64	58	28	8	2	11	33	73	75	129	76	3	1
86	0	1	10	46	32	36	15	2	0	4	20	50	41	72	21	2	0
87	0	0	6	9	13	15	5	0	0	1	9	28	18	20	8	1	0
88	0	0	5	5	6	6	3	0	0	0	4	11	8	7	6	1	0
89	0	0	4	4	4	3	3	0	0	0	3	5	5	5	5	1	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Laboratory: Standard-Tech Co. Ltd Testing Center  
NVLAP CODE: 201011-0

Report Format Number STD/QR4909-A/2

Address: 8th floor, Block B, No. 11 Caipin Road, Guangzhou Science City, Tianhe, Guangzhou 510663, China

Tel: 8620-3229 0320 Fax: 8620-32290422 <http://www.standard-tech.com>



126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## BUG Rating:B2-U0-G2

**IESNA Luminaire Flux Distribution Table:**

Zone	Lumens	Luminaire %
FL - Front-Low (0-30)	831.06	9.2
FM - Front-Medium (30-60)	2700.1	29.8
FH - Front-High (60-80)	2435.5	26.9
FVH - Front-Very High (80-90)	101	1.1
<b>Total Forward Light</b>	<b>6067.7</b>	<b>66.9</b>

BL - Back-Low (0-30)	636.01	7.0
BM - Back-Medium (30-60)	1418.6	15.6
BH - Back-High (60-80)	907.38	10.0
BVH - Back-Very High (80-90)	36.293	0.4
<b>Total Back Light</b>	<b>2998.3</b>	<b>33.1</b>

UL - Uplight-Low (90-100)	0	0.0
UH - Uplight-High (100-180)	0	0.0
<b>Total Up Light</b>	<b>0</b>	<b>0.0</b>

<b>BUG (Back, Up, Glare) Rating</b>	<b>B2-U0-G2</b>
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	6067.7	0	6067.7
Street Side	2998.3	0	2998.3



**3. Test Equipment**

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
EE-09	Goniophotometer system	2015-07-01	2016-06-30
D908S	Standard Lamp	2015-07-01	2016-06-30
PF210	Power Meter for Goniophotometer	2015-07-01	2016-06-30
Uncertainty Photometric Measurement (Sphere):1.74% Chromaticity Measurement(Sphere):14.3K Photometric Measurement(Goniophotometer):1.62%			

**\*\*\*\*\* END OF DATASHEET PACKAGE \*\*\*\*\***