



Report No.: ELC1905042E-D

## LM-79-08 Test Report

For

# Beyond LED Technology

## Parking Garage Luminaires

Model name(s): AST-PG05B-75WAT2A1-abcd

Remark: "a" can be any two letters to represent lamp colors, Where "b" can be "S" or blank to represent Surge protector or None Surge protector. Where "c" can be "MS" or "PS" or blank represent Motion-sensor or PIR-sensor or None motion-sensor. "d" can be any two digits to represent CCT.

Representative (Tested) Model:

AST-PG05B-75WAT2A1-abc30(tested at 0% CCT setting)

AST-PG05B-75WAT2A1-abc40(tested at 50% CCT setting)

AST-PG05B-75WAT2A1-abc50(tested at 100% CCT setting)

Model Different: All construction and rating are the same, except CCT

Test & Report By:

*Sherry Yang*

Engineer: Sherry Yang

Date: Jun.10, 2019

Review By:

*Jason Luo*

Manager: Jason Luo



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### 1.1 Product Information:

Organization Name	ASmart LIGHT CO., LTD	
Brand Name	ASmart	
Model Number	AST-PG05B-75WAT2A1-abcd	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Parking Garage Luminaires	
Rated Voltage / Frequency	100-277 VAC, 50/60 Hz	
Nominal Power	75W	
Rated Initial Lamp Lumen	--	
Declared CCT	3000K,4000K,5000K	
LED Manufacturer	Lumileds Holding B.V.	
LED Model	L128-3080RA35000H1 L128-5080RA35000H1	
Sample Number	ELC1905042E-D1	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

#### Photo





## 1.2 Test Specifications:

Date of Receipt	Jun. 06, 2019
Date of Test	Jun. 07, 2019
Test item	<ol style="list-style-type: none"><li>1. Total Luminous Flux</li><li>2. Luminous Distribution Intensity</li><li>3. Luminous Efficacy</li><li>4. Correlated Color Temperature</li><li>5. Color Rendering Index</li><li>6. Chromaticity Coordinate</li><li>7. Electrical Parameters</li></ol>
Reference Standard	<ol style="list-style-type: none"><li>1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products</li><li>2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products</li><li>3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources</li><li>4. CIE 15-2004 Technical Report Colorimetry</li><li>5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source</li><li>6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems</li></ol>
Reference Work Instruction	BL-QP-033

## 1.3 Test Methods

### 1) Photometric and Light Distribution Measurement – Goniophotometer Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at  $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ , 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 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at  $1\text{ }^{\circ}$  vertical intervals and  $22.5\text{ }^{\circ}$  horizontal intervals.

### 2) Chromaticity Measurement – Sphere-Spectroradiometer Method:

Chromaticity parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at  $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ . The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral power distribution taken at 5 nm intervals over the range of 380 to 780 nm.

### 3) Electrical Measurements:

Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at  $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ . The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Voltage, frequency, current, power, power factor and total harmonic distortion were measured by and read from the power meter.

**2.1 Electrical, Photometric and Chromaticity Measurements***(Refer to Work Instruction BL-QP-033)*

<b>Test date</b>	2019-06-07	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	AST-PG05B-75WAT2A1-abc30 (tested at 0% CCT setting)		

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
ELC1905042	120.0	60	0.6054	72.14	0.993	14.31
E-D1	277.0	60	0.2847	71.53	0.907	16.14
<b>DLC Pass Criteria</b>					<b>&gt;= 0.9(-3%)</b>	<b>&lt;= 20(+5)</b>

**Chromaticity Measurement - Sphere-Spectroradiometer Method:**

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	80	R9	6
Frequency (Hz)	60	R2	91	R10	79
CCT (K)	2969	R3	96	R11	79
Duv	-0.00057	R4	80	R12	70
Chromaticity (x, y)	x=0.4383 y=0.4031	R5	81	R13	83
Chromaticity (u', v')	u(u')=0.2519 v'(v')=0.5212	R6	89	R14	99
Color Rendering Index (CRI)	82.2	R7	81	R15	73
R9	6	R8	58	--	--

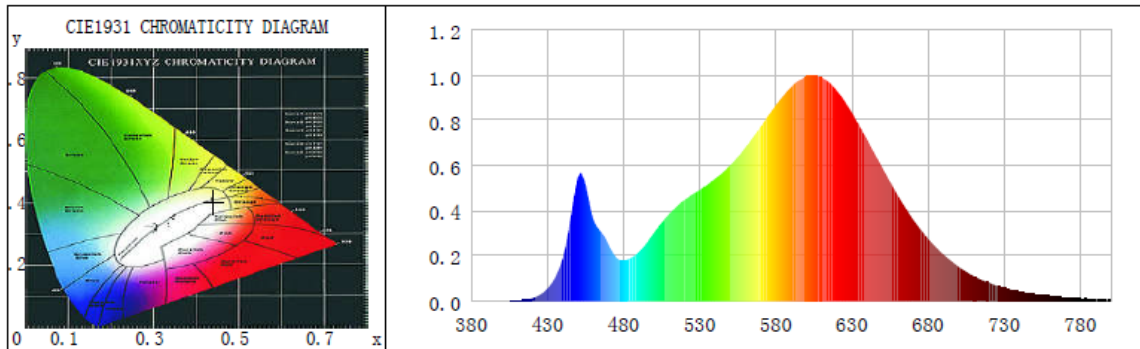
**Photometric Measurement – Goniophotometer Method:**

Parameter	Result		DLC V4.4 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	9146.6	8876.6	5000-10000(-10%)
Luminous Efficacy (lm/W)	126.79	124.10	Premium: >= 115(-3%)
Most worst Luminous/Highest Watts	123.05		



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## Spectral Power Distribution & Chromaticity Diagram



**2.2 Electrical, Photometric and Chromaticity Measurements***(Refer to Work Instruction BL-QP-033)*

<b>Test date</b>	2019-06-07	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	AST-PG05B-75WAT2A1-abc40 (tested at 50% CCT setting)		

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
ELC1905042	120.0	60	0.6091	72	0.985	14.22
E-D2	277.0	60	0.2916	71.64	0.887	16.05
<b>DLC Pass Criteria</b>					$\geq 0.9(-3\%)$	$\leq 20(+5)$

**Chromaticity Measurement - Sphere-Spectroradiometer Method:**

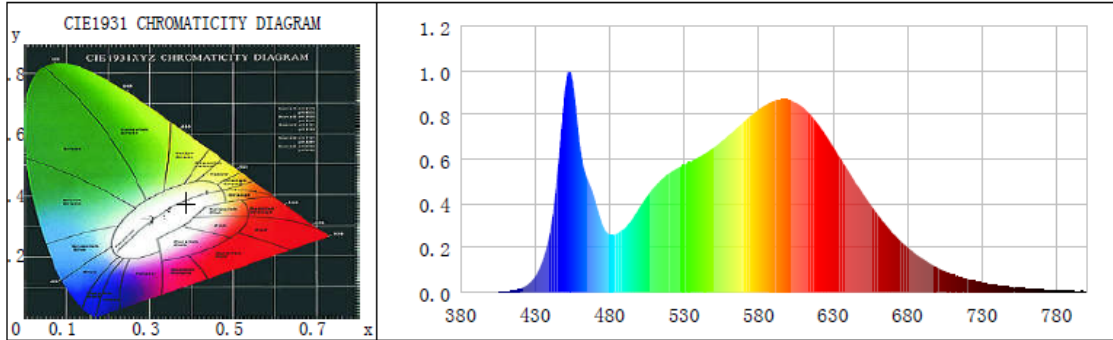
Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	82	R9	10
Frequency (Hz)	60	R2	91	R10	79
CCT (K)	3861	R3	96	R11	80
Duv	-0.00150	R4	81	R12	63
Chromaticity (x, y)	x=0.3856 y=0.3767	R5	83	R13	85
Chromaticity (u', v')	u(u')=0.2285 v'(v')=0.5023	R6	88	R14	98
Color Rendering Index (CRI)	83.6	R7	84	R15	76
R9	10	R8	63	--	--

**Photometric Measurement – Goniophotometer Method:**

Parameter	Result		DLC V4.4 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	10485.0	10239.6	$\geq 10000(-10\%)$
Luminous Efficacy (lm/W)	145.63	142.93	Premium: $\geq 120(-3\%)$
Most worst Luminous/Highest Watts	142.22		
Zonal lumens in the 60-80 °zone (%)	30.3	--	$\geq 30(-3)$
Zonal lumens in the 70-80 °zone (%)	11.2	--	$\leq 25(+3)$
Beam Angle (°)	113	--	--
Center Beam Candle Power (cd)	2393	--	--



**Spectral Power Distribution & Chromaticity Diagram**



**Zonal Lumen Tabulation**

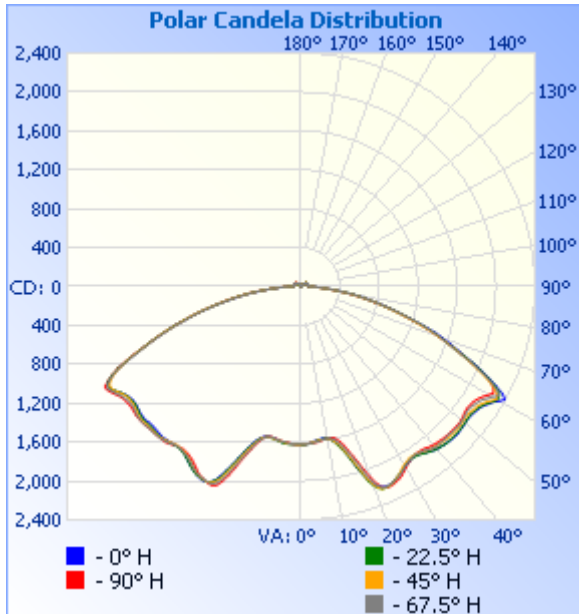
Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Luminaire
0-30	1,662.1	15.9%	15.9%
0-4	2,986.9	28.5%	28.5%
0-60	6,586.4	62.8%	62.8%
60-90	3,564.2	34%	34%
70-100	1,653.2	15.8%	15.8%
90-120	221.5	2.1%	2.1%
0-90	10,150.6	96.8%	96.8%
90-180	334.1	3.2%	3.2%
0-180	10,484.7	100%	100%

Lumens Per Zone				
Zone	Lumens	% Total	Zone	Lumens % Total
0-10	152.7	1.5%	90-100	91.2 0.9%
10-20	496.6	4.7%	100-110	71.1 0.7%
20-30	1,012.8	9.7%	110-120	59.2 0.6%
30-40	1,324.8	12.6%	120-130	54.1 0.5%
40-50	1,661.2	15.8%	130-140	33.1 0.3%
50-60	1,938.3	18.5%	140-150	15.5 0.1%
60-70	2,002.2	19.1%	150-160	6.7 0.1%
70-80	1,171.5	11.2%	160-170	2.5 0%
80-90	390.5	3.7%	170-180	0.7 0%





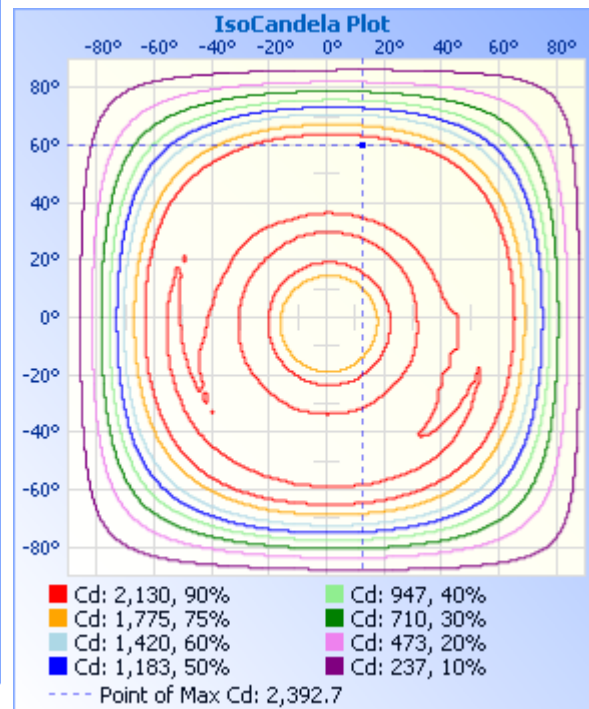
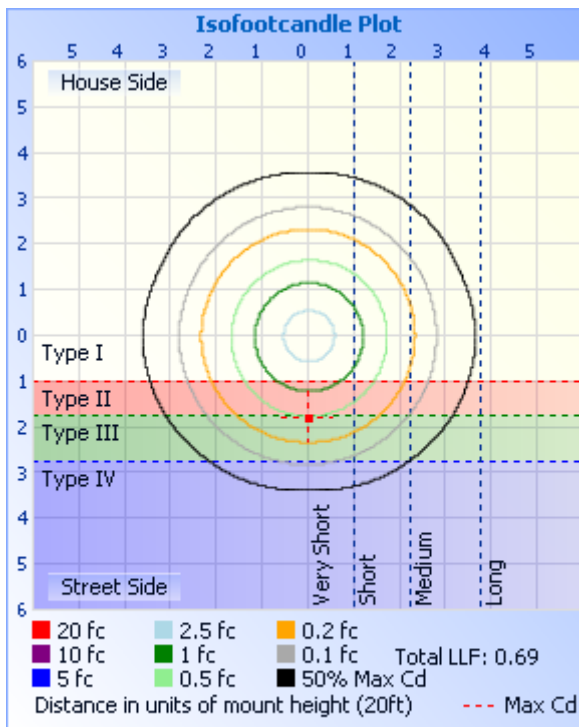
**Photometric Data**



**Illuminance at a Distance**

	Center Beam fc	Beam Width	
17.0ft	5.61 fc	117.7 ft	51.4 ft
34.0ft	1.40 fc	235.4 ft	102.8 ft
51.0ft	0.62 fc	353.0 ft	154.2 ft
68.0ft	0.35 fc	470.7 ft	205.6 ft
85.0ft	0.22 fc	588.4 ft	257.0 ft
102.0ft	0.16 fc	706.1 ft	308.4 ft

Vert. Spread: 147.8°  
Horiz. Spread: 113.0°







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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	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622	1622
1	1621	1623	1620	1622	1621	1619	1620	1621	1618	1622	1623	1622	1622	1622	1626	1622	1621
2	1620	1621	1618	1621	1619	1618	1620	1621	1620	1620	1623	1622	1621	1621	1623	1620	1620
3	1613	1615	1612	1616	1614	1616	1619	1622	1621	1622	1621	1620	1619	1619	1618	1614	1613
4	1605	1609	1606	1611	1611	1616	1617	1623	1621	1623	1621	1617	1614	1615	1612	1607	1605
5	1594	1601	1598	1607	1608	1613	1613	1620	1621	1623	1616	1611	1609	1610	1607	1601	1594
6	1587	1590	1593	1603	1606	1609	1613	1616	1617	1621	1611	1606	1605	1604	1598	1593	1587
7	1580	1585	1590	1596	1600	1604	1607	1609	1609	1614	1605	1603	1601	1598	1590	1589	1580
8	1577	1583	1587	1591	1592	1594	1600	1601	1600	1606	1599	1598	1595	1591	1584	1584	1577
9	1575	1583	1585	1589	1585	1585	1593	1592	1591	1597	1593	1592	1587	1580	1578	1581	1575
10	1582	1589	1588	1586	1577	1578	1588	1580	1583	1588	1587	1583	1579	1575	1577	1584	1582
11	1601	1604	1599	1590	1579	1578	1583	1579	1580	1586	1584	1576	1574	1576	1582	1596	1601
12	1628	1631	1625	1606	1589	1580	1580	1578	1580	1584	1583	1577	1574	1584	1600	1619	1628
13	1663	1670	1656	1631	1609	1592	1585	1581	1582	1589	1586	1587	1583	1603	1628	1652	1663
14	1709	1717	1702	1669	1641	1619	1599	1590	1591	1599	1597	1605	1605	1633	1666	1695	1709
15	1768	1775	1760	1719	1686	1657	1629	1613	1611	1619	1621	1633	1639	1677	1716	1749	1768
16	1842	1850	1830	1781	1754	1705	1670	1652	1640	1649	1662	1674	1686	1731	1775	1818	1842
17	1934	1935	1912	1855	1824	1768	1730	1699	1683	1691	1710	1736	1745	1797	1851	1898	1934
18	2017	2019	2000	1938	1905	1838	1793	1756	1735	1741	1764	1798	1811	1873	1933	1983	2017
19	2095	2111	2095	2043	1997	1922	1867	1826	1797	1805	1830	1868	1886	1959	2039	2082	2095
20	2160	2176	2165	2127	2094	2026	1955	1903	1872	1878	1908	1949	1984	2054	2130	2159	2160
21	2200	2218	2215	2191	2168	2116	2050	1989	1951	1961	1987	2038	2078	2152	2204	2214	2200
22	2223	2240	2239	2225	2222	2187	2138	2084	2032	2042	2077	2120	2159	2212	2245	2244	2223
23	2234	2242	2241	2238	2246	2232	2205	2161	2110	2130	2152	2185	2215	2238	2256	2256	2234
24	2230	2236	2237	2230	2247	2245	2249	2211	2182	2184	2201	2219	2238	2241	2252	2253	2230
25	2222	2224	2227	2224	2241	2245	2255	2235	2215	2215	2223	2226	2239	2236	2240	2238	2222
26	2204	2206	2209	2211	2231	2234	2249	2239	2233	2231	2229	2222	2228	2226	2226	2220	2204
27	2189	2187	2187	2197	2217	2227	2232	2229	2233	2227	2222	2216	2217	2215	2208	2200	2189
28	2170	2168	2165	2179	2200	2211	2217	2220	2227	2220	2212	2209	2203	2197	2182	2179	2170
29	2149	2149	2137	2156	2175	2195	2199	2209	2212	2211	2200	2195	2184	2173	2159	2157	2149

**Laboratory: Belling Test Laboratory Co., LTD A2LA Certificate# 4810.01**  
**Unit 401, No. 309 Xinxin Seven Road, Zengcheng District,**  
**Guangzhou, People' s Republic of China. Website: <http://www.blst.com>**

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31	2115	2114	2099	2115	2127	2149	2153	2177	2176	2178	2158	2158	2129	2127	2115	2115	2115
32	2105	2104	2085	2101	2110	2126	2127	2154	2157	2156	2132	2134	2107	2108	2098	2103	2105
33	2097	2101	2081	2089	2095	2107	2105	2131	2134	2134	2110	2115	2088	2095	2090	2098	2097
34	2098	2102	2083	2085	2086	2094	2088	2113	2112	2114	2092	2097	2075	2088	2088	2099	2098
35	2106	2109	2089	2092	2083	2088	2079	2099	2092	2099	2081	2089	2066	2087	2091	2108	2106
36	2118	2122	2101	2100	2086	2080	2075	2091	2079	2088	2073	2081	2063	2090	2100	2115	2118
37	2133	2136	2115	2107	2089	2083	2077	2083	2073	2083	2068	2079	2070	2097	2116	2130	2133
38	2148	2151	2127	2124	2102	2090	2081	2084	2072	2081	2067	2077	2078	2111	2133	2147	2148
39	2164	2164	2138	2137	2113	2096	2088	2091	2080	2085	2077	2085	2092	2129	2152	2163	2164
40	2173	2174	2145	2150	2121	2101	2094	2100	2087	2094	2088	2098	2108	2147	2168	2180	2173
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42	2189	2187	2156	2150	2131	2110	2102	2107	2099	2112	2108	2118	2123	2160	2180	2187	2189
43	2195	2195	2161	2152	2137	2113	2107	2111	2102	2114	2119	2127	2125	2163	2182	2196	2195
44	2200	2195	2165	2149	2137	2113	2104	2111	2095	2115	2123	2131	2129	2162	2187	2204	2200
45	2205	2198	2171	2148	2140	2115	2105	2107	2096	2113	2122	2131	2127	2165	2194	2211	2205
46	2206	2198	2171	2155	2142	2119	2105	2105	2094	2111	2122	2134	2126	2164	2200	2211	2206
47	2205	2199	2171	2157	2144	2126	2110	2106	2091	2107	2122	2135	2135	2174	2206	2216	2205
48	2199	2195	2172	2158	2144	2129	2118	2110	2093	2113	2124	2140	2140	2178	2201	2214	2199
49	2198	2191	2169	2157	2145	2136	2126	2117	2103	2114	2129	2145	2146	2172	2201	2205	2198
50	2192	2190	2165	2148	2142	2131	2129	2121	2105	2118	2133	2147	2147	2167	2190	2197	2192
51	2186	2185	2159	2147	2133	2126	2128	2116	2103	2116	2133	2145	2148	2160	2184	2193	2186
52	2187	2181	2162	2140	2124	2120	2123	2112	2101	2111	2124	2141	2148	2157	2172	2191	2187
53	2189	2180	2159	2132	2116	2112	2112	2108	2092	2099	2117	2131	2144	2147	2172	2191	2189
54	2197	2188	2169	2134	2113	2106	2104	2100	2088	2094	2109	2123	2140	2145	2171	2193	2197
55	2209	2197	2182	2142	2119	2110	2102	2098	2085	2088	2105	2120	2139	2152	2177	2204	2209
56	2219	2213	2187	2159	2125	2117	2112	2101	2086	2093	2104	2125	2142	2160	2192	2219	2219
57	2242	2230	2212	2172	2140	2130	2126	2112	2092	2100	2108	2134	2150	2168	2204	2239	2242
58	2272	2261	2239	2193	2161	2154	2150	2132	2109	2114	2119	2150	2162	2189	2232	2262	2272
59	2302	2296	2277	2232	2187	2186	2183	2161	2133	2134	2141	2169	2181	2214	2262	2302	2302
60	2352	2328	2315	2262	2224	2236	2229	2199	2165	2163	2168	2196	2209	2250	2298	2343	2352
61	2393	2326	2301	2319	2257	2279	2290	2229	2200	2198	2197	2218	2233	2285	2348	2361	2393

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Certificate#4810.01

62	2340	2301	2251	2284	2239	2258	2298	2255	2226	2222	2217	2242	2258	2336	2349	2340	2340
63	2242	2227	2183	2204	2192	2203	2254	2250	2230	2229	2207	2237	2260	2311	2304	2265	2242
64	2146	2131	2091	2115	2128	2129	2184	2179	2191	2199	2171	2185	2203	2220	2220	2166	2146
65	2045	2029	1988	2005	2024	2040	2086	2105	2120	2133	2114	2124	2137	2148	2122	2069	2045
66	1935	1924	1892	1900	1912	1931	1957	2003	2042	2052	2029	2035	2062	2036	2017	1970	1935
67	1822	1810	1790	1784	1802	1822	1839	1896	1930	1939	1934	1924	1955	1916	1893	1858	1822
68	1727	1704	1692	1681	1701	1718	1726	1786	1826	1835	1835	1816	1842	1796	1777	1757	1727
69	1639	1607	1597	1588	1598	1632	1623	1676	1723	1726	1722	1704	1731	1690	1672	1662	1639
70	1547	1519	1504	1514	1507	1545	1544	1587	1624	1635	1624	1616	1636	1606	1591	1579	1547
71	1462	1430	1410	1429	1420	1457	1461	1503	1527	1536	1533	1516	1542	1526	1507	1485	1462
72	1350	1328	1305	1334	1322	1361	1372	1417	1432	1443	1435	1423	1446	1445	1411	1387	1350
73	1240	1234	1212	1240	1216	1254	1281	1326	1341	1352	1339	1323	1358	1348	1317	1278	1240
74	1139	1133	1111	1138	1123	1163	1176	1223	1239	1249	1248	1234	1257	1248	1210	1178	1139
75	1044	1038	1022	1047	1036	1081	1090	1134	1154	1161	1164	1147	1166	1142	1110	1075	1044
76	961	952	937	954	949	986	995	1035	1064	1075	1078	1061	1076	1048	1017	977	961
77	874	866	850	864	864	898	905	941	972	984	987	971	991	960	922	898	874
78	797	792	779	790	776	809	820	847	886	889	893	877	898	869	842	812	797
79	719	713	700	710	700	730	733	768	796	810	813	798	815	795	761	740	719
80	647	640	628	638	624	653	657	691	719	734	738	724	739	710	685	660	647
81	577	568	555	566	553	572	584	607	643	658	654	650	663	636	611	587	577
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83	438	427	417	427	407	427	443	468	498	515	508	501	524	496	476	454	438
84	370	360	352	360	343	362	371	398	419	435	437	430	449	421	401	381	370
85	312	303	296	308	290	306	316	339	358	369	371	365	377	361	339	327	312
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87	213	206	203	207	195	208	218	237	252	260	263	258	266	254	237	227	213
88	174	168	165	169	158	169	179	195	207	216	218	213	220	205	196	182	174
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90	114	111	112	113	106	109	115	122	133	138	136	136	142	132	124	118	114
91	100	99	98	99	93	96	101	106	113	116	115	112	115	110	108	103	100
92	90	89	88	90	85	87	89	95	98	100	101	98	102	97	96	91	90
93	82	82	82	83	79	81	83	86	88	90	90	89	92	88	87	84	82

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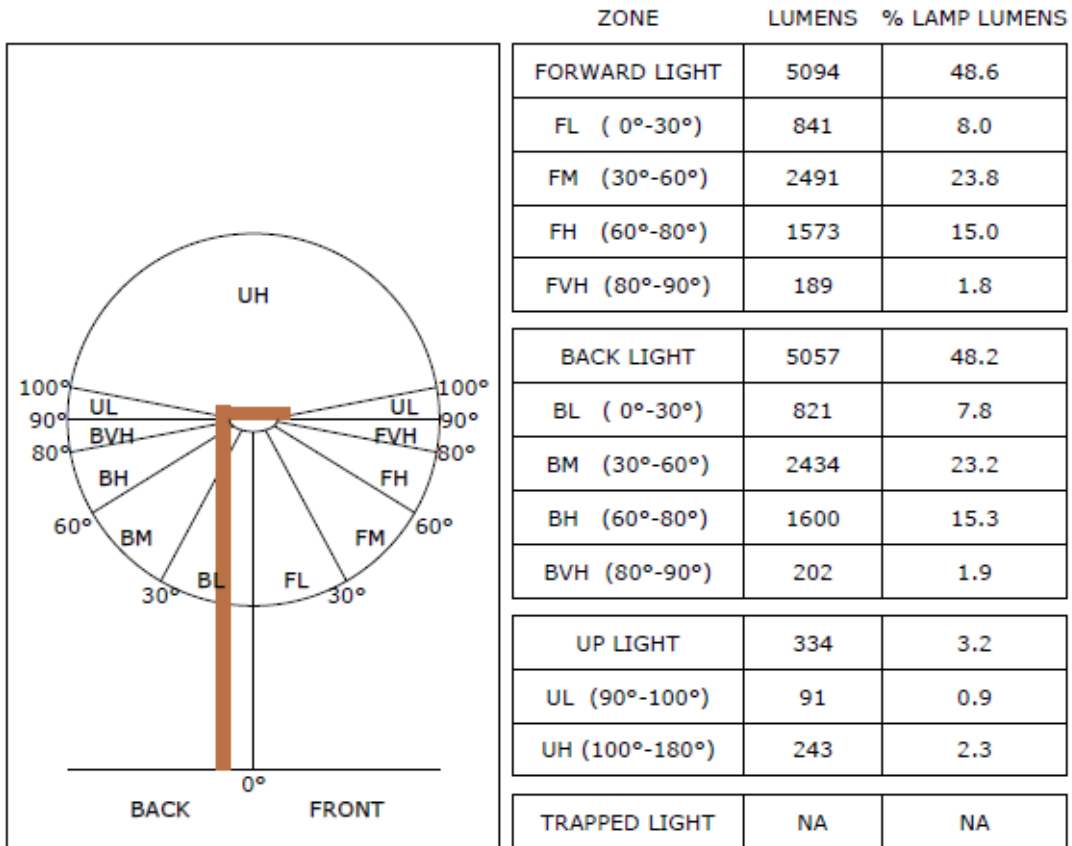
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179	7	7	6	6	6	6	7	7	8	8	7	6	5	6	6	6	7
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**2.3 Electrical, Photometric and Chromaticity Measurements***(Refer to Work Instruction BL-QP-033)*

<b>Test date</b>	2019-06-07	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	AST-PG05B-75WAT2A1-abc50 (tested at 100% CCT setting)		

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
ELC1905042	120.0	60	0.6644	72.23	0.906	14.33
E-D3	277.0	60	0.2917	71.75	0.888	16.18
<b>DLC Pass Criteria</b>					<b>&gt;= 0.9(-3%)</b>	<b>&lt;= 20(+5)</b>

**Chromaticity Measurement - Sphere-Spectroradiometer Method:**

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	79	R9	0
Frequency (Hz)	60	R2	88	R10	72
CCT (K)	4948	R3	94	R11	78
Duv	0.00249	R4	79	R12	54
Chromaticity (x, y)	x=0.3471 y=0.3582	R5	79	R13	82
Chromaticity (u', v')	u(u')=0.2102 v'=0.4882	R6	83	R14	97
Color Rendering Index (CRI)	81.5	R7	85	R15	73
R9	0	R8	63	--	--

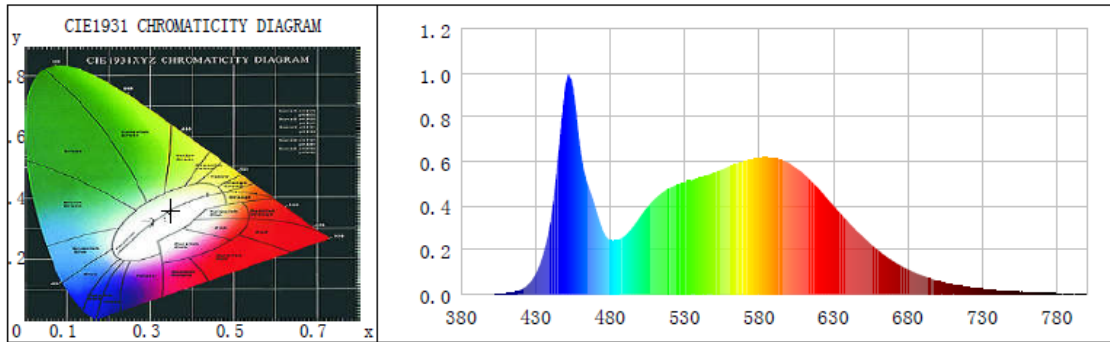
**Photometric Measurement – Goniophotometer Method:**

Parameter	Result		DLC V4.4 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	10114.4	9957.5	>=10000(-10%)
Luminous Efficacy (lm/W)	140.03	138.78	Premium: >= 120(-3%)
Most worst Luminous/Highest Watts	137.86		



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## Spectral Power Distribution & Chromaticity Diagram





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### 3. Test Equipment

Equipment Name	Model No.	Serial No.	Next Calibration Date
Goniophotometric System	GPM-3000	DYHXF120001	2020-01-14
AC Power Source	CHP-500C	N/A	2020-01-13
Total Luminous Flux Standard Lamp	24V/150W	DYJYR040040	2020-01-21
Digital Power Meter	WT500	DYDWQ200006	2020-01-13
Integral Sphere (2M)	2M	DYJCE120067	2020-01-14
Digital Power Meter	WT500	DYDWQ200006	2020-01-13
Optical Color and Electrical Measurement System	CMS-3000S	DYJCE120067	2020-01-14

Expand Uncertainty:  
Photometric Measurement (Sphere): 2.08%, k=2  
Chromaticity Measurement(Sphere):25.6K, k=2  
Photometric Measurement(Goniophotometer):2.645%, k=2

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