

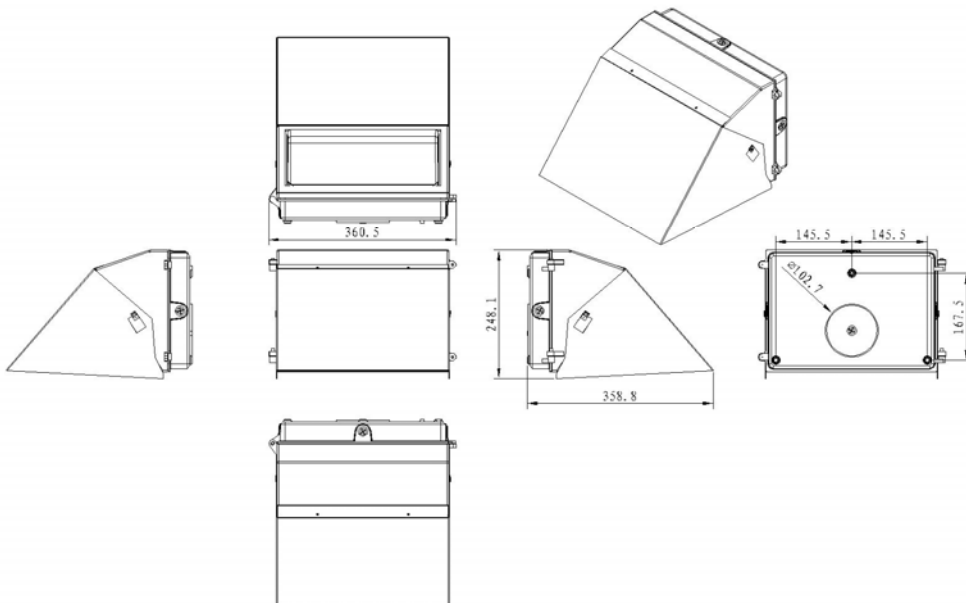
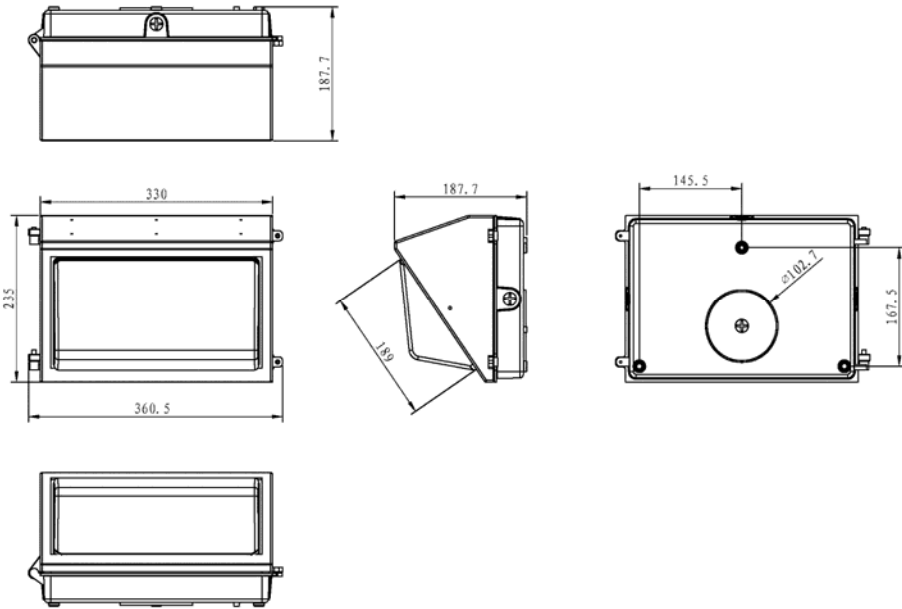


Cat# 71426
LED Wall-PACK



Model :		71426
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC
	Input Current	0.85A Max.
	Input Power	78 W
	Power Factor	PF≥0.9
	Luminance	7335 LM
	Luminous Efficiency	91 LM/W
	CRI	83
	Beam Angle	120°
	Main Structure	Aluminium + Tempered Glass
	Surface	Baking Varnish
LED DRIVER	Output Voltage	25.2-42VDC
	Output Current	1.95A
	Driver Efficiency	91%
LED	LED Type	SMD
	LED Quantity	70 PCS
	LED Manufacturer	philips
	LED Efficacy	140 lm/W
	Color Temperature	WW/NW/CW/R/G/B 5091K
LIFESPAN & ENVIRONMENT	Lifespan	50000 Hrs.
	Warranty	5 Years
	IP Rating	IP65
	Operating Temperature	-40F—+131F
	Storage Temperature, Humidity	-40°C—+80°C , 10—90% RH
SAFETY&EMC	Safety Norms	EN60598, EN61347-2-13, EN62031, EN62471, UL1598, UL8750
	Withstand Voltage	I/P-FG: 2121VDC
	Grounding Resistance	25A 100mΩ
	Electromagnetic Compatibility	EN55015, EN61000-2-3, EN61000-3-3, EN61547
OTHERS	Dimension	Pls refer to attached dimension drawing
	Net Weight(Kg)	4.3
	Gross Weight(Kg)	5.2
	Box Size	--
	Carton Size	390*230*315
	Q'ty / Carton	1

Dimension:





Report No.: GZE140709-U

NVLAP LAB CODE 201011-0

LM-79-08 Test Report

For

Morris Products Inc.
53 Carey Rd.
Queensbury, NY 12804

Outdoor Wall-Mounted Area Luminaires

Model name(s): 71426

Representative (Tested) Model: 71426

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

Test & Report By:

Sean Zhuo

Engineer: Sean Zhuo

Date: Nov.15,2014

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

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>

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	Nov.15,2014
Test Report No.	GZE140709-U
Laboratory Contact Name	Tommy Liang

Product Information:

Organization Name	DONGGUAN THAILIGHT SEMICONDUCTOR LIGHTING CO.,LTD.	
Brand Name	THAILIGHT	
Model Number	TL-WMG801-01(3000K)	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Wall-Mounted Area Luminaires	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Integrating Sphere
Goniophotometer
Electrical Measurements:
Output
Output

Input Wattage	--	79.19	W
Input Current	--	0.6707	A
Input Voltage (ac)	--	120.0	V
Power Factor	--	0.9839	
Off-State Power	--	0	W

Photometric Characteristics

Total Initial Lumen Output	--	5682.2	lm
Initial Lumen Efficacy	--	71.75	lm/w
Correlated color temperature / CCT	3086	--	K
Color rendering index / CRI	83.2	--	
R9 Value	21	--	
Duv	0.0002	--	
Luminous Intensity Distribution			
Center beam candlepower (if applicable)		2905	cd
Beam angle (if applicable)		93.0	°
Zonal lumens in the 0°-60° zone	-----	82	%
Zonal lumens in the 60°-90° zone		17.9	%
Zonal lumens in the 90°-120° zone		0	%
Zonal lumens in the 120°-180° zone		0.1	%

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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	Nov.15,2014
Test Report No.	GZE140709-S
Laboratory Contact Name	Tommy Liang

Product Information:

Organization Name	Morris Products Inc.	
Brand Name	MORRIS	
Model Number	71426	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Wall-Mounted Area Luminaires	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Integrating Sphere
Goniophotometer
Electrical Measurements:
Output
Output

Input Wattage	78.67	--	W
Input Current	0.6576	--	A
Input Voltage (ac)	120.1	--	V
Power Factor	0.9961	--	
Off-State Power	0	--	W

Photometric Characteristics

Total Initial Lumen Output	7335	--	lm
Initial Lumen Efficacy	91.97	--	lm/w
Correlated color temperature / CCT	5091	--	K
Color rendering index / CRI	83.1	--	
R9 Value	8	--	
Duv	0.0026	--	
Luminous Intensity Distribution			
Center beam candlepower (if applicable)	-----	--	
Beam angle (if applicable)		--	
Zonal lumens in the 0°-60° zone		--	
Zonal lumens in the 60°-90° zone		--	
Zonal lumens in the 90°-120° zone		--	
Zonal lumens in the 120°-180° zone		--	

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Test Specifications:	
Date of Receipt	: Oct.26,2014
Date of Test	: Oct.27,2014
Test item	: Total Luminous Flux, Luminous Distribution Intensity, Luminous Efficacy, Correlated Color Temperature, Color Rendering Index, Chromaticity Coordinate, Electrical parameters
Reference Standard	IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources CIE 15-2004 Technical Report Colorimetry IESNA LM-16-93 Practical Guide to Colorimetry of Light Source 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 120 Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1° vertical intervals and 22.5° horizontal intervals.

2. Photometric and Electrical Measurements – Integrating Sphere Method:

Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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 Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at least 5 nm intervals over the range of 380 to 780 nm.

1. Product Information:

Brand Name	Morris Products
Model Number	71426
Luminaire Type	Outdoor Wall-Mounted Area Luminaires
Rated Voltage / Frequency	120 ~ 277 Vac, 50/60 Hz
Nominal Power	80W
Rated Initial Lamp Lumen	--
Declared CCT	5000K
LED Manufacturer	PHILIPS
LED Model	LUXEON 3535 2D
Sample Receipt Date	Oct.26,2014
Sample Number	(5000K)

Photo



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2.1 Electrical, Photometric and Chromaticity Measurements (Refer to Work Instruction QD25)	IES LM-79 2008
--	-----------------------

Test date	2014-10-27	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	TL-WMG801-01(3000K)		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
140709-49	120.0	60	0.6707	79.19	0.9839	6.22
	277.2	60	0.3160	79.72	0.9102	12.17

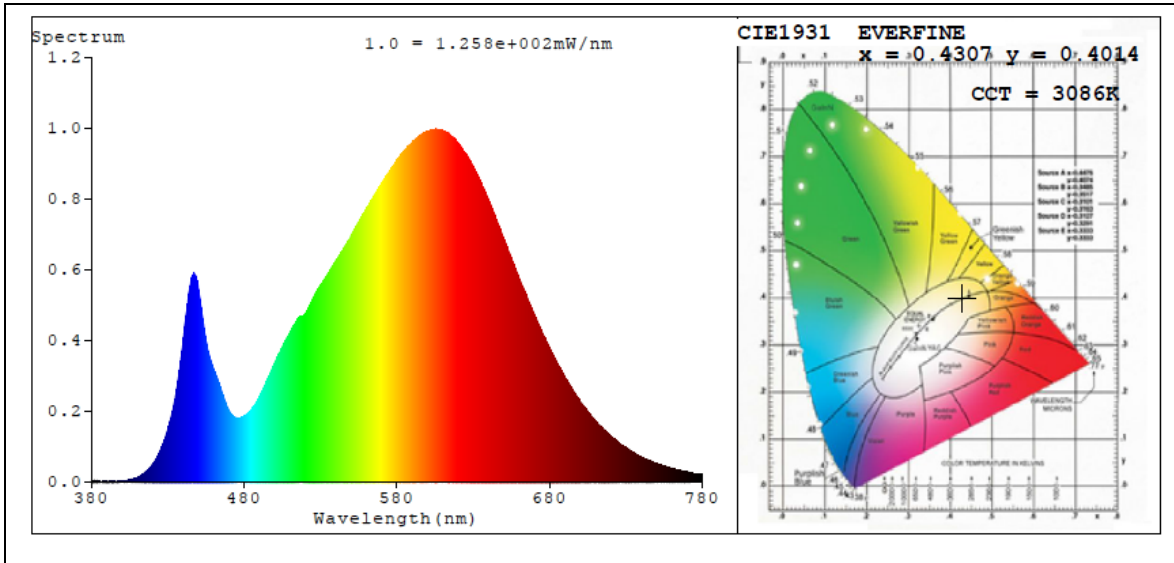
Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	21
Frequency (Hz)	60	R2	89	R10	74
Color Rendering Index (CRI)	83.2	R3	95	R11	80
R9	20	R4	82	R12	69
CCT (K)	3086	R5	81	R13	83
Chromaticity (x, y)	x=0.4307 y=0.4014	R6	85	R14	97
Chromaticity (u', v')	u'=0.2477 v'=0.5194	R7	86	R15	77
Duv	0.0002	R8	66	--	--

Goniophotometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Total Luminous (lm)	5682.2
Luminous Efficacy (lm/W)	71.75
Beam Angle°	94.0
Center Beam Candle Power (cd)	2905
S/MH(C0/180)	1.06
S/MH(C90/270)	0.85

Spectral Power Distribution and Chromaticity Diagram



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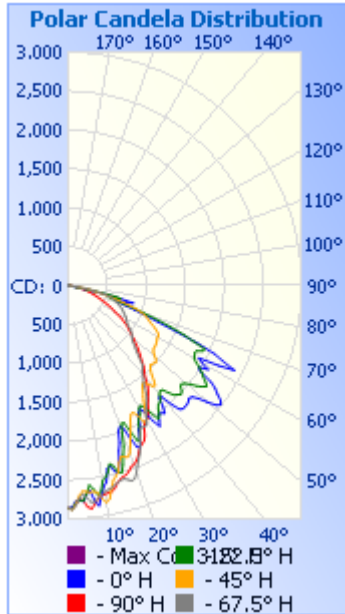
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Zonal Lumen Tabulation

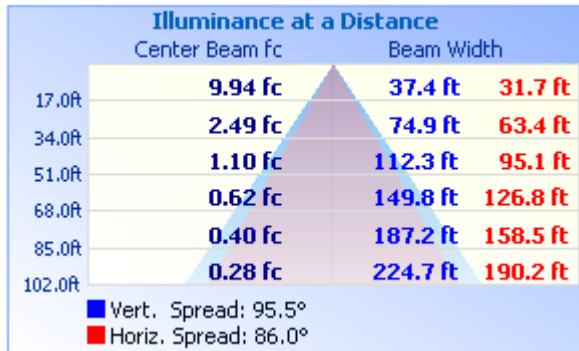
Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Luminaire
0-30	1,896.4	33.4%	33.4%
0-40	2,898.8	51%	51%
0-60	4,658.1	82%	82%
60-90	1,015.8	17.9%	17.9%
70-100	340.0	6%	6%
90-120	1.6	0%	0%
0-90	5,673.8	99.9%	99.9%
90-180	7.4	0.1%	0.1%
0-180	5,681.3	100%	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	253.4	4.5%	90-100	0.3	0%
10-20	691.0	12.2%	100-110	0.6	0%
20-30	952.0	16.8%	110-120	0.7	0%
30-40	1,002.4	17.6%	120-130	0.9	0%
40-50	918.9	16.2%	130-140	1.0	0%
50-60	840.3	14.8%	140-150	1.2	0%
60-70	676.1	11.9%	150-160	1.3	0%
70-80	305.4	5.4%	160-170	1.0	0%
80-90	34.3	0.6%	170-180	0.4	0%

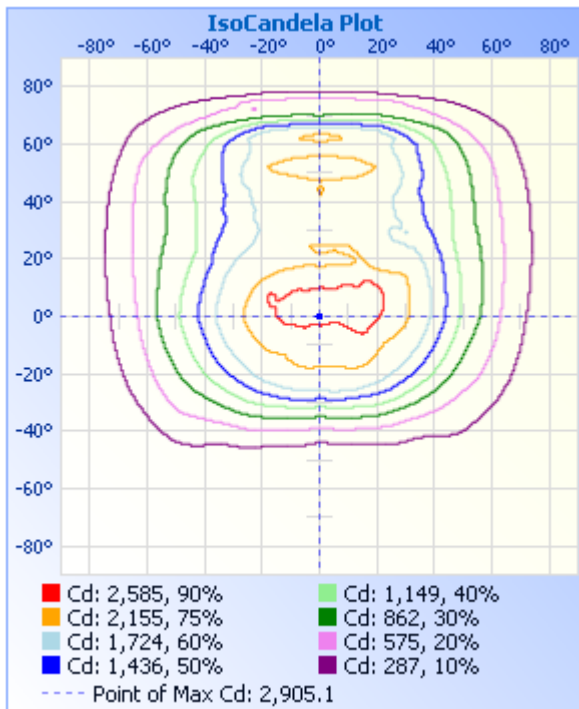
Photometric Data



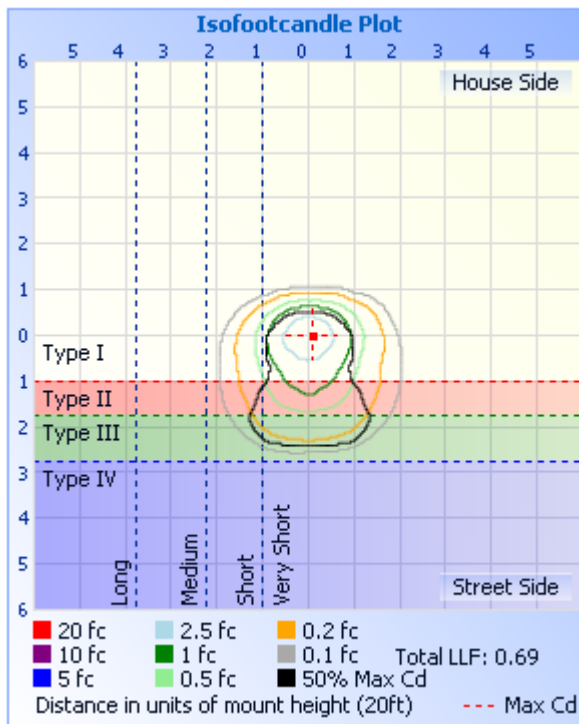
Illuminance Plots



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	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873	2873
1	2864	2880	2894	2895	2881	2852	2815	2786	2766	2765	2777	2808	2840	2861	2869	2867	2864
2	2782	2803	2817	2839	2825	2772	2726	2692	2658	2657	2686	2751	2833	2859	2818	2785	2782
3	2767	2771	2715	2745	2764	2683	2615	2578	2545	2541	2602	2706	2825	2844	2765	2735	2767
4	2793	2783	2660	2698	2779	2652	2507	2487	2481	2465	2516	2629	2777	2793	2737	2756	2793
5	2704	2702	2670	2745	2868	2690	2450	2435	2475	2444	2451	2541	2748	2725	2715	2722	2704
6	2658	2589	2681	2809	2895	2700	2452	2438	2545	2507	2407	2502	2785	2733	2678	2623	2658
7	2800	2644	2678	2811	2837	2646	2487	2492	2614	2590	2410	2511	2818	2782	2632	2655	2800
8	2868	2724	2698	2766	2769	2559	2530	2519	2573	2594	2484	2513	2823	2804	2597	2790	2868
9	2737	2690	2784	2731	2740	2500	2556	2491	2431	2476	2576	2512	2833	2815	2659	2795	2737
10	2631	2553	2842	2706	2733	2479	2549	2402	2282	2322	2596	2519	2837	2824	2788	2622	2631
11	2581	2517	2803	2684	2724	2466	2514	2301	2216	2210	2528	2532	2821	2823	2900	2519	2581
12	2417	2460	2680	2670	2714	2463	2469	2244	2211	2175	2429	2551	2803	2823	2905	2453	2417
13	2388	2362	2579	2647	2677	2456	2410	2235	2236	2189	2352	2570	2790	2818	2806	2314	2388
14	2469	2398	2533	2623	2623	2433	2343	2246	2280	2229	2297	2586	2788	2793	2714	2325	2469
15	2496	2497	2490	2602	2590	2396	2278	2269	2284	2261	2277	2591	2777	2794	2643	2439	2496
16	2379	2507	2375	2594	2565	2361	2230	2279	2227	2248	2281	2580	2734	2801	2535	2502	2379
17	2228	2411	2312	2617	2551	2339	2185	2250	2146	2204	2295	2541	2680	2789	2460	2419	2228
18	2135	2287	2323	2649	2522	2322	2151	2185	2089	2154	2303	2466	2650	2777	2462	2311	2135
19	1978	2194	2341	2633	2481	2297	2119	2119	2089	2119	2299	2399	2643	2786	2519	2213	1978
20	1940	2027	2308	2570	2457	2254	2094	2075	2051	2115	2275	2348	2604	2787	2548	2099	1940
21	1968	1907	2232	2490	2432	2215	2071	2043	1966	2077	2235	2304	2548	2766	2499	1952	1968
22	2117	1908	2131	2419	2394	2186	2056	1994	1906	1996	2185	2244	2510	2705	2387	1938	2117
23	2256	2041	2050	2357	2332	2155	2037	1935	1859	1933	2131	2175	2487	2613	2313	2022	2256
24	2289	2195	1972	2280	2279	2098	2005	1875	1806	1891	2079	2109	2470	2541	2201	2228	2289
25	2180	2178	1893	2195	2252	2040	1963	1818	1760	1848	2020	2068	2426	2488	2103	2276	2180
26	2061	2114	1847	2104	2230	1997	1916	1763	1690	1804	1957	2036	2371	2435	2023	2231	2061
27	2035	1984	1836	2060	2174	1963	1865	1705	1590	1750	1896	1999	2335	2368	1954	2152	2035
28	1916	1944	1897	2064	2085	1931	1807	1639	1465	1660	1841	1955	2295	2308	1957	2020	1916
29	1869	1904	2007	2064	2026	1890	1749	1561	1329	1548	1786	1913	2247	2261	1968	1978	1869

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30	1844	1821	2020	2021	2002	1834	1692	1469	1216	1426	1725	1872	2188	2216	2015	1910	1844
31	1895	1807	1947	1951	1992	1774	1630	1360	1132	1317	1658	1832	2127	2202	2050	1876	1895
32	2055	1844	1853	1884	1954	1730	1564	1254	1056	1229	1584	1782	2083	2193	1973	1930	2055
33	2162	1958	1779	1845	1893	1696	1494	1156	969	1154	1511	1732	2029	2161	1923	2011	2162
34	2097	2075	1726	1811	1834	1654	1431	1069	890	1080	1436	1681	1971	2118	1852	2125	2097
35	2024	2044	1678	1769	1799	1604	1363	989	810	994	1355	1623	1917	2055	1781	2150	2024
36	2034	1971	1627	1706	1748	1545	1298	914	733	921	1272	1564	1858	2002	1721	2037	2034
37	2064	1924	1584	1629	1711	1493	1227	849	660	843	1190	1506	1786	1919	1680	1986	2064
38	1986	1912	1587	1574	1664	1447	1161	783	582	769	1107	1448	1733	1853	1643	1997	1986
39	1856	1882	1638	1537	1604	1404	1093	713	509	697	1027	1389	1690	1788	1658	1932	1856
40	1876	1827	1692	1495	1541	1356	1026	651	445	623	948	1327	1618	1719	1711	1894	1876
41	2034	1803	1707	1453	1498	1306	960	588	377	553	872	1263	1555	1667	1771	1881	2034
42	2148	1808	1649	1432	1465	1249	898	526	331	491	801	1200	1511	1629	1734	1858	2148
43	2171	1887	1579	1400	1421	1193	837	469	287	428	733	1138	1454	1571	1679	1905	2171
44	2169	1963	1530	1337	1375	1142	775	411	253	379	668	1075	1399	1513	1625	1995	2169
45	2166	1986	1493	1277	1326	1095	706	359	222	331	599	1013	1347	1482	1571	2015	2166
46	2151	2018	1471	1224	1285	1046	648	313	196	290	541	953	1299	1442	1540	2032	2151
47	2129	2003	1483	1184	1244	999	590	271	180	253	486	895	1239	1413	1510	2044	2129
48	2146	1948	1489	1143	1203	954	533	236	164	223	434	837	1183	1333	1488	2030	2146
49	2215	1932	1498	1102	1162	910	479	208	150	200	387	782	1129	1266	1501	2035	2215
50	2335	1965	1474	1075	1118	870	428	186	137	178	344	729	1076	1214	1516	2052	2335
51	2448	2021	1429	1060	1079	833	380	167	127	161	305	679	1028	1171	1486	2089	2448
52	2496	2104	1394	1043	1043	797	337	151	120	145	268	633	986	1128	1466	2115	2496
53	2456	2167	1373	1024	1008	760	299	136	112	134	235	589	949	1099	1429	2162	2456
54	2374	2206	1363	997	972	722	264	125	106	126	205	550	913	1074	1417	2185	2374
55	2312	2157	1365	966	939	685	232	116	101	117	181	515	878	1052	1398	2193	2312
56	2221	2096	1360	938	901	646	204	108	96	110	160	482	844	1024	1395	2145	2221
57	2028	2052	1353	911	859	606	179	101	90	103	144	450	812	986	1392	2086	2028
58	1985	1995	1347	892	817	561	158	95	85	97	129	417	776	950	1388	2053	1985
59	2103	1922	1334	878	772	515	139	90	80	90	117	383	735	914	1374	1992	2103
60	1993	1872	1330	864	726	467	122	85	73	82	109	348	690	880	1353	1911	1993
61	1926	1863	1330	851	684	423	109	79	66	76	101	312	644	848	1327	1906	1926

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62	2197	1847	1312	836	643	382	99	73	60	69	94	280	601	817	1297	1884	2197
63	2403	1853	1276	816	604	341	90	67	54	63	86	248	560	789	1267	1869	2403
64	2211	1927	1241	797	566	302	82	60	50	57	79	219	522	764	1232	1908	2211
65	2077	1942	1195	780	529	263	75	54	45	51	73	191	486	735	1196	1953	2077
66	1822	1769	1153	763	494	228	68	47	40	45	66	165	450	711	1165	1872	1822
67	1512	1615	1126	746	461	196	61	41	33	39	60	143	415	684	1139	1663	1512
68	1243	1429	1088	727	429	167	55	36	26	33	53	123	382	654	1107	1469	1243
69	1078	1242	1049	704	400	142	49	30	20	25	45	106	352	628	1059	1339	1078
70	910	1035	998	681	372	121	43	23	13	18	38	92	326	604	1013	1174	910
71	780	897	928	661	346	103	37	17	9	12	32	80	302	582	959	989	780
72	693	755	841	641	320	87	30	11	9	9	25	69	277	559	872	847	693
73	659	626	747	615	294	74	25	9	8	8	19	60	251	534	770	722	659
74	794	550	638	586	268	63	20	8	7	7	14	52	227	503	669	627	794
75	868	611	549	550	242	53	15	7	6	7	9	45	205	471	584	644	868
76	699	698	478	506	218	45	10	6	6	6	8	38	183	436	509	702	699
77	493	620	416	453	195	38	8	5	5	5	7	32	162	400	443	624	493
78	261	445	359	396	174	32	7	5	4	4	6	26	142	357	388	422	261
79	115	229	314	340	154	26	6	4	3	4	5	20	124	313	324	256	115
80	74	106	258	285	132	21	4	3	3	3	4	16	105	268	264	139	74
81	61	71	192	231	111	17	4	2	2	2	4	12	87	221	195	82	61
82	48	56	128	179	90	13	3	2	2	2	3	10	70	176	130	64	48
83	37	43	71	131	70	10	2	1	1	1	2	8	55	136	83	49	37
84	27	31	48	93	51	7	2	1	1	1	2	6	41	100	54	36	27
85	18	21	32	61	36	6	1	0	0	1	2	5	28	63	35	24	18
86	12	13	20	37	24	4	0	0	0	0	1	4	18	35	20	15	12
87	7	8	12	21	14	2	0	0	0	0	1	2	11	18	11	9	7
88	2	3	6	11	8	1	0	0	0	0	1	1	5	7	5	3	2
89	1	1	3	5	3	0	0	0	0	0	1	1	1	2	2	1	1
90	1	3	1	1	0	0	0	0	0	0	0	1	0	0	1	1	1

2.2 Electrical, Photometric and Chromaticity Measurements (Refer to Work Instruction QD25)	IES LM-79 2008
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Test date	2014-10-27	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	TL-WMG801-01(5000K)		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
140709-50	120.1	60	0.6576	78.67	0.9961	5.47
	277.1	60	0.3049	79.23	0.9377	11.01

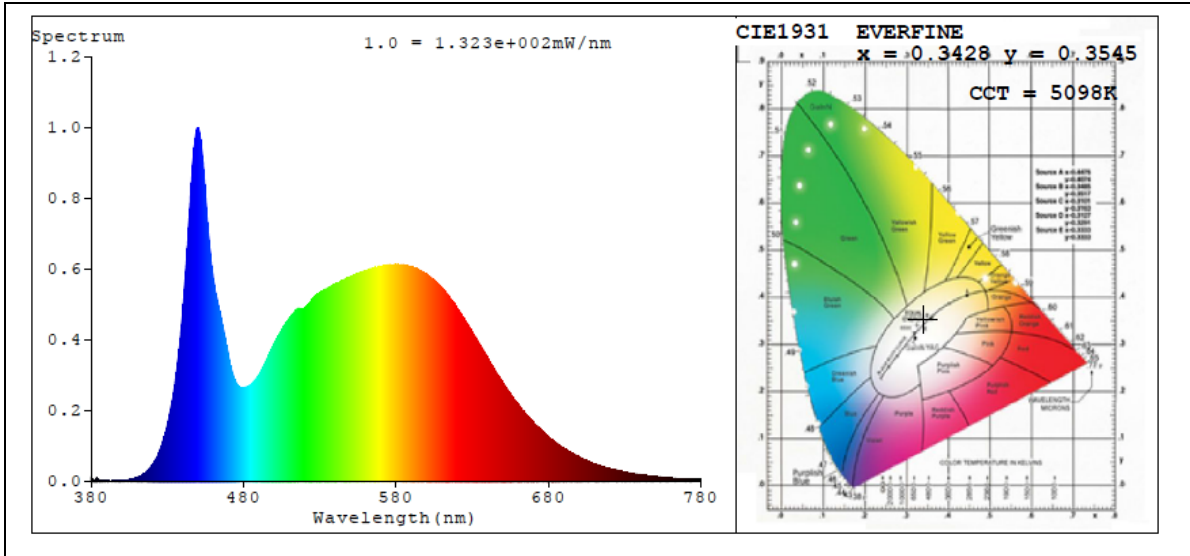
Sphere-Spectroradiometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Color Rendering Index (CRI)	83.1
R9	8
CCT (K)	5091
Chromaticity (x, y)	x=0.3430 y=0.3551
Chromaticity (u', v')	u'=0.2087 v'=0.4861
Duv	0.0026
Total Luminous (lm)	7335
Luminous Efficacy (lm/W)	91.97

Special Color Rendering Indices			
R1	81	R9	8
R2	88	R10	71
R3	93	R11	82
R4	83	R12	64
R5	82	R13	83
R6	84	R14	96
R7	87	R15	76
R8	67	--	--

Spectral Power Distribution and Chromaticity Diagram

Spectral Power Distribution:



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>

3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2014-07-01	2015-06-30
ST-R-331	Spectral analysis system HAAS-2000	2014-07-01	2015-06-30
D204	Standard Lamp	2014-07-01	2015-06-30
PF2010	Power Meter for Integrating Sphere	2014-07-01	2015-06-30
EE-09	Goniophotometer system	2014-07-01	2015-06-30
D908S	Standard Lamp	2014-07-01	2015-06-30
PF210	Power Meter for Goniophotometer	2014-07-01	2015-06-30
ST-R-181A	Temperature Tester	2014-07-01	2015-06-30

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