



Report No.: GZE151161-G

NVLAP LAB CODE 201011-0

## LM-79-08 Test Report

For

**AOK LED LIGHT COMPANY LIMITED**

**(Brand Name: AOK)**

Building 1, St George's Science and Technology Industrial Park, Shajin Street, Shenzhen,  
Guangdong Province, China Zip 518104

### Outdoor Pole/Arm-mounted Area and Roadway Luminaires

Model name(s): AOK-75WiT-HV

Representative (Tested) Model: AOK-75WiT-HV(3000K)  
AOK-75WiT-HV(5700K)

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

Test & Report By:

*Johnson Sun*

Engineer: Johnson Sun

Date: Feb.01,2016

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: Standard-Tech Building, No.6 Guanhong Road, Guangzhou Science City, Guangzhou 510663, China

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

**Performance Assessment:**

Model name	CCT(K)	Total Luminous (lm)	Power (W)	Luminous Efficacy (lm/W)
AOK-75WiT-HV(3000K)	3000	9832.4	74.58	131.84
AOK-75WiT-HV(3500K)	3500	9973.1 <sup>*1</sup>	74.74 <sup>*2</sup>	133.45 <sup>*3</sup>
AOK-75WiT-HV(4000K)	4000	10114 <sup>*1</sup>	74.74 <sup>*2</sup>	135.33 <sup>*3</sup>
AOK-75WiT-HV(4500K)	4500	10255 <sup>*1</sup>	74.74 <sup>*2</sup>	137.21 <sup>*3</sup>
AOK-75WiT-HV(5000K)	5000	10395 <sup>*1</sup>	74.74 <sup>*2</sup>	139.10 <sup>*3</sup>
AOK-75WiT-HV(5700K)	5700	10536	74.89	140.69

\*1: This value is calculated and the calculation formula is as below:

$$9973.1 = (10536 - 9832.4) / 5 + 9832.4$$

$$10114 = (10536 - 9832.4) / 5 + 9973.1$$

$$10255 = (10536 - 9832.4) / 5 + 10114$$

$$10395 = (10536 - 9821.4) / 5 + 10255$$

\*2: This value is calculated and the calculation formula is as below:

$$74.74 = (74.89 + 74.58) / 2$$

\*3: This value is calculated and the calculation formula is as below:

$$133.45 = 9973.1 / 74.74$$

$$135.33 = 10114 / 74.74$$

$$137.21 = 10255 / 74.74$$

$$139.10 = 10395 / 74.74$$

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	Feb.01,2016
Test Report No.	GZE151161-G
Laboratory Contact Name	Tommy Liang

**Product Information:**

Organization Name	AOK LED LIGHT COMPANY LIMITED		
Brand Name	AOK		
Model Number	AOK-75WiT-HV(3000K)		
SKU (if available)	N/A		
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Pole/Arm-mounted Area and Roadway 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	--	74.58	W
Input Current	--	0.2739	A
Input Voltage (ac)	--	277.1	V
Power Factor	--	0.9827	
Off-State Power	--	0	W

**Photometric Characteristics**

Total Initial Lumen Output	--	9832.4	lm
Initial Lumen Efficacy	--	131.84	lm/w
Correlated color temperature / CCT	3089	--	K
Color rendering index / CRI	73.2	--	
R9 Value	0	--	
Duv	-0.0016	--	
<b>Luminous Intensity Distribution</b>			
Center beam candlepower (if applicable)		2427	cd
Beam angle (if applicable)		100.1	°
Zonal lumens in the 0°-60° zone	-----	86.3	%
Zonal lumens in the 60°-90° zone		13.5	%
Zonal lumens in the 90°-120° zone		0	%
Zonal lumens in the 120°-180° zone		0.2	%

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**Laboratory Information:**

Name of Test Laboratory	Standard-Tech Co. Ltd
Date of Test Report	Feb.01,2016
Test Report No.	GZE151161-G
Laboratory Contact Name	Tommy Liang

**Product Information:**

Organization Name	AOK LED LIGHT COMPANY LIMITED		
Brand Name	AOK		
Model Number	AOK-75WiT-HV(5700K)		
SKU (if available)	N/A		
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Pole/Arm-mounted Area and Roadway 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	74.89	--	W
Input Current	0.2758	--	A
Input Voltage (ac)	277.0	--	V
Power Factor	0.9802	--	
Off-State Power	0	--	W

**Photometric Characteristics**

Total Initial Lumen Output	10536	--	lm
Initial Lumen Efficacy	140.69	--	lm/w
Correlated color temperature / CCT	5379	--	K
Color rendering index / CRI	76.4	--	
R9 Value	0	--	
Duv	-0.0017	--	
<b>Luminous Intensity Distribution</b>			
Center beam candlepower (if applicable)			cd
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	: Dec.14,2015
Date of Test	: Jan.25,2016
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 277 Volts 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.

#### 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 277 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	AOK
Model Number	AOK-75WiT-HV
Luminaire Type	Outdoor Pole/Arm-mounted Area and Roadway Luminaires
Rated Voltage / Frequency	200~ 480Vac, 50/60Hz
Nominal Power	75W
Rated Initial Lamp Lumen	--
Declared CCT	3000K,3500K,4000K,4500K,5000K,5700K
LED Manufacturer	Philips Lumileds
LED Model	LUXEON 3030 2D
Sample Receipt Date	Dec.14,2015
Sample Number	GZE151161-G1(3000K),G2(5700K)

**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>	2016-01-30	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	AOK-75WiT-HV(3000K)		

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE151161	277.1	60	0.2739	74.58	0.9827	6.92
-G1	480.0	60	0.1673	74.38	0.9264	12.73

**Sphere-Spectroradiometer Method:**

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	277.0	R1	70	R9	0
Frequency (Hz)	60	R2	84	R10	61
Color Rendering Index (CRI)	73.2	R3	94	R11	61
R9	0	R4	68	R12	49
CCT (K)	3089	R5	69	R13	73
Chromaticity (x, y)	x=0.4285 y=0.3970	R6	76	R14	96
Chromaticity (u', v')	u'=0.2482 v'=0.5173	R7	79	R15	64
Duv	-0.0016	R8	47	--	--

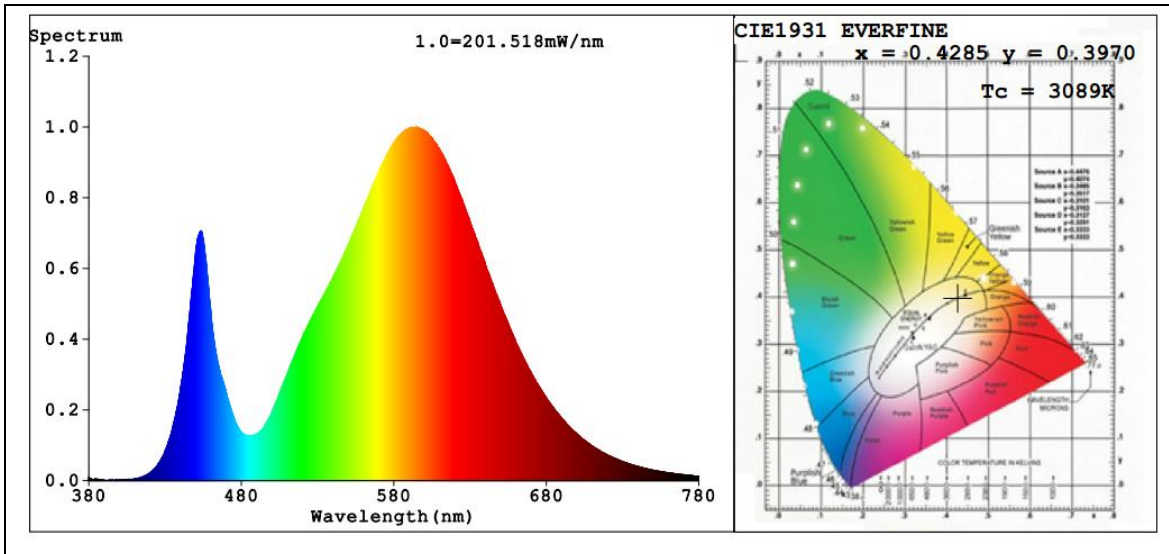
**Goniophotometer Method:**

Parameter	Result
Test Voltage (V)	277.0
Frequency (Hz)	60
Total Luminous (lm)	9832.4
Luminous Efficacy (lm/W)	131.84
Beam Angle°	100.1
Center Beam Candle Power (cd)	2427

**Goniophotometer Method:**

Parameter	Result
Test Voltage (V)	480.0
Frequency (Hz)	60
Total Luminous (lm)	9844.3
Luminous Efficacy (lm/W)	132.36

**Spectral Power Distribution & Chromaticity Diagram**



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**Zonal Lumen Tabulation**

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	2,446.9	24.9%
0-40	4,302.2	43.7%
0-60	8,487.6	86.3%
60-90	1,330.9	13.5%
70-100	325.6	3.3%
90-120	2.8	0%
0-90	9,818.5	99.8%
90-180	15.3	0.2%
0-180	9,833.7	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	235.7	2.4%	90-100	0.0	0%
10-20	774.1	7.9%	100-110	0.7	0%
20-30	1,437.0	14.6%	110-120	2.1	0%
30-40	1,855.3	18.9%	120-130	3.2	0%
40-50	2,116.6	21.5%	130-140	3.2	0%
50-60	2,068.8	21.0%	140-150	2.6	0%
60-70	1,005.3	10.2%	150-160	1.9	0%
70-80	273.3	2.8%	160-170	1.1	0%
80-90	52.2	0.5%	170-180	0.4	0%

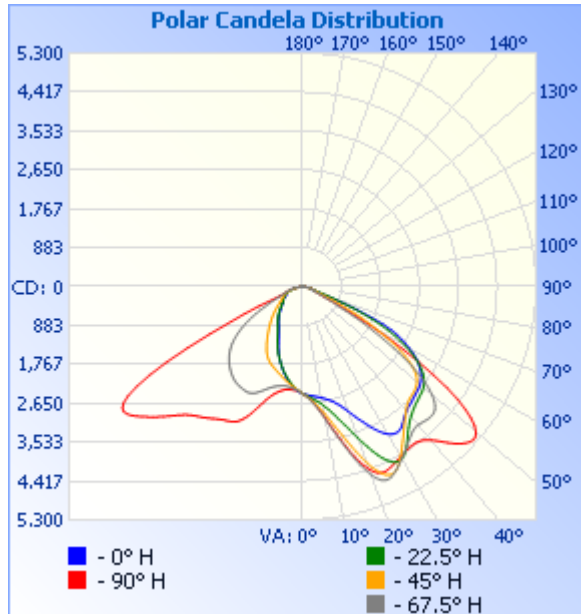
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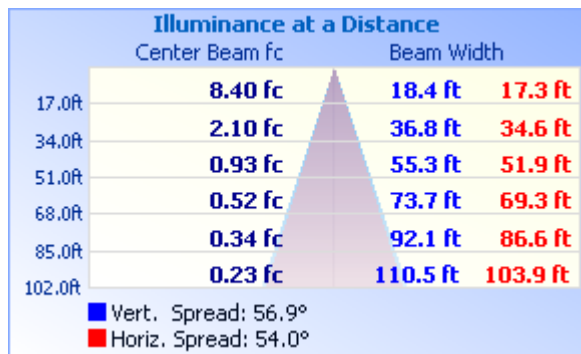
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### Photometric Data



### Illuminance Plots



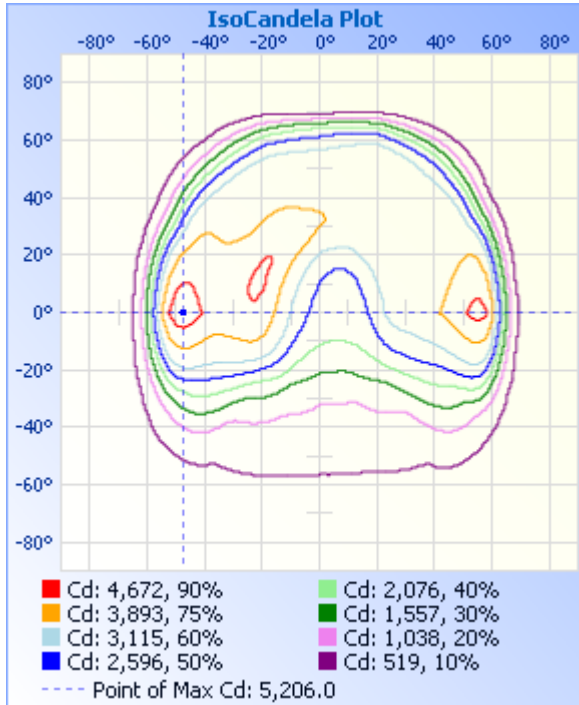
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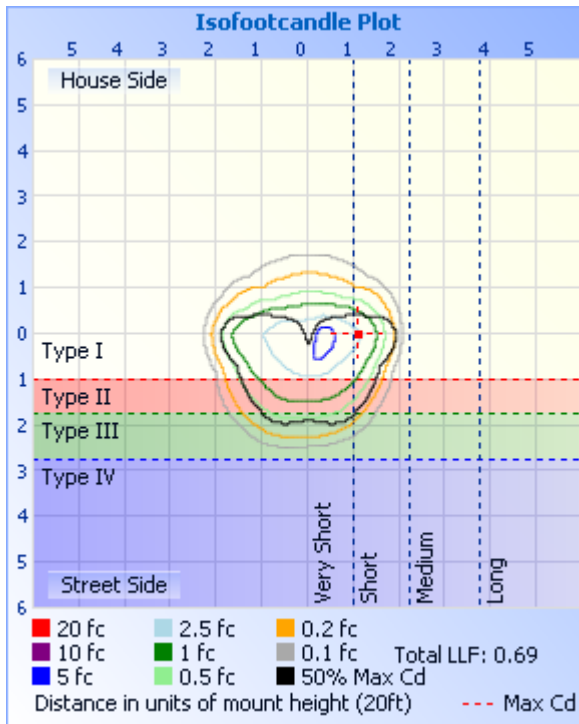
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### ISOCANDELA DIAGRAM



### 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	2427	2427	2427	2427	2427	2427	2427	2427	2427	2427	2427	2427	2427	2427	2427	2427	2427
1	2442	2453	2458	2459	2455	2447	2433	2419	2409	2400	2396	2396	2402	2409	2420	2432	2442
2	2456	2477	2492	2495	2488	2471	2441	2409	2388	2371	2365	2371	2382	2395	2413	2435	2456
3	2468	2500	2527	2537	2526	2499	2449	2399	2365	2341	2337	2349	2366	2386	2408	2436	2468
4	2479	2524	2566	2586	2574	2533	2459	2387	2338	2309	2311	2334	2358	2381	2404	2436	2479
5	2490	2551	2610	2642	2629	2575	2470	2372	2307	2275	2287	2323	2356	2382	2402	2435	2490
6	2502	2580	2662	2709	2693	2622	2481	2355	2272	2239	2264	2314	2355	2384	2402	2436	2502
7	2515	2613	2719	2784	2767	2672	2495	2335	2232	2200	2240	2305	2355	2386	2406	2439	2515
8	2529	2650	2785	2870	2850	2729	2509	2313	2190	2160	2215	2297	2357	2390	2411	2444	2529
9	2546	2693	2858	2967	2945	2793	2525	2289	2148	2118	2189	2291	2365	2398	2416	2449	2546
10	2565	2743	2940	3089	3052	2864	2541	2264	2103	2077	2164	2290	2377	2409	2421	2456	2565
11	2587	2798	3032	3212	3175	2943	2559	2236	2056	2036	2139	2293	2397	2426	2429	2465	2587
12	2613	2860	3145	3335	3303	3028	2578	2207	2007	1994	2114	2301	2421	2446	2439	2478	2613
13	2641	2929	3258	3477	3443	3119	2596	2175	1958	1949	2091	2312	2451	2474	2455	2493	2641
14	2672	3003	3371	3626	3588	3214	2615	2143	1905	1901	2068	2326	2485	2510	2477	2507	2672
15	2708	3097	3501	3781	3738	3313	2633	2110	1855	1852	2045	2342	2527	2549	2503	2526	2708
16	2752	3191	3642	3945	3887	3411	2652	2076	1805	1803	2024	2362	2577	2600	2536	2548	2752
17	2802	3286	3792	4106	4037	3507	2669	2039	1755	1755	2002	2387	2638	2657	2577	2577	2802
18	2863	3398	3942	4267	4177	3602	2683	1999	1703	1709	1983	2416	2710	2728	2626	2614	2863
19	2930	3520	4097	4413	4303	3685	2692	1956	1648	1663	1962	2449	2797	2814	2688	2660	2930
20	3006	3650	4246	4546	4411	3760	2695	1908	1588	1613	1944	2486	2891	2911	2759	2715	3006
21	3095	3786	4388	4655	4500	3819	2690	1855	1526	1561	1923	2525	2993	3017	2842	2779	3095
22	3184	3919	4511	4734	4560	3861	2675	1799	1464	1506	1902	2565	3095	3131	2939	2850	3184
23	3273	4054	4610	4778	4594	3883	2650	1739	1403	1451	1880	2604	3194	3247	3047	2929	3273
24	3364	4179	4678	4789	4600	3887	2614	1679	1346	1398	1854	2641	3280	3355	3160	3013	3364
25	3460	4296	4713	4768	4585	3871	2568	1619	1291	1347	1827	2669	3354	3451	3273	3107	3460
26	3555	4392	4712	4727	4561	3841	2514	1559	1240	1297	1796	2689	3406	3524	3386	3201	3555
27	3643	4466	4680	4678	4532	3798	2447	1498	1193	1247	1762	2701	3443	3579	3481	3296	3643
28	3727	4511	4621	4621	4506	3750	2373	1438	1152	1200	1726	2704	3468	3613	3561	3386	3727

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29	3801	4528	4541	4566	4480	3700	2293	1381	1114	1157	1684	2701	3487	3628	3623	3467	3801
30	3864	4514	4450	4509	4458	3647	2210	1329	1082	1116	1638	2694	3506	3630	3658	3540	3864
31	3909	4472	4358	4453	4437	3592	2125	1281	1054	1082	1589	2686	3525	3626	3671	3599	3909
32	3937	4409	4265	4394	4416	3534	2042	1239	1029	1052	1540	2678	3551	3623	3663	3640	3937
33	3946	4332	4173	4336	4397	3477	1962	1199	1005	1024	1491	2670	3580	3614	3638	3658	3946
34	3935	4245	4089	4278	4383	3417	1882	1163	982	998	1442	2661	3614	3607	3602	3658	3935
35	3904	4157	4005	4225	4374	3355	1806	1127	958	973	1395	2648	3650	3599	3561	3641	3904
36	3856	4073	3928	4180	4378	3293	1733	1091	933	948	1347	2631	3685	3589	3519	3613	3856
37	3801	3999	3850	4139	4395	3232	1660	1057	907	924	1301	2610	3722	3579	3482	3579	3801
38	3751	3934	3781	4109	4427	3172	1590	1024	881	901	1256	2585	3754	3570	3447	3546	3751
39	3709	3879	3715	4091	4478	3111	1519	990	855	878	1212	2559	3788	3555	3415	3517	3709
40	3674	3834	3656	4090	4549	3054	1448	957	828	855	1170	2531	3823	3539	3387	3500	3674
41	3646	3794	3605	4101	4635	3003	1379	924	802	830	1129	2501	3866	3523	3363	3492	3646
42	3624	3755	3565	4116	4739	2951	1314	890	776	804	1090	2469	3918	3508	3340	3491	3624
43	3607	3725	3536	4133	4847	2897	1251	854	750	777	1053	2436	3980	3499	3319	3494	3607
44	3590	3698	3514	4143	4950	2845	1192	818	724	750	1016	2400	4055	3497	3301	3498	3590
45	3571	3678	3498	4145	5042	2789	1135	784	699	724	980	2362	4139	3494	3287	3503	3571
46	3549	3658	3485	4135	5119	2729	1081	750	674	698	942	2323	4231	3492	3278	3510	3549
47	3527	3642	3469	4104	5176	2661	1028	717	652	671	905	2280	4324	3492	3276	3517	3527
48	3511	3623	3449	4048	5206	2589	977	687	631	647	868	2232	4416	3495	3274	3527	3511
49	3497	3602	3422	3963	5198	2508	927	659	612	626	831	2181	4508	3495	3275	3538	3497
50	3474	3578	3386	3849	5135	2421	879	635	595	606	794	2124	4600	3495	3276	3553	3474
51	3449	3548	3339	3702	5025	2328	833	612	580	589	758	2059	4689	3495	3273	3568	3449
52	3413	3504	3275	3519	4852	2225	787	593	565	574	724	1989	4778	3489	3270	3578	3413
53	3372	3450	3191	3307	4628	2112	744	577	553	560	691	1913	4860	3476	3263	3583	3372
54	3320	3384	3083	3066	4343	1988	702	562	541	547	661	1831	4924	3451	3250	3577	3320
55	3257	3303	2953	2795	4006	1856	665	550	530	536	633	1744	4956	3406	3232	3562	3257
56	3189	3211	2799	2502	3576	1713	630	539	519	526	607	1650	4938	3328	3207	3532	3189
57	3115	3103	2621	2200	3146	1563	601	530	509	517	584	1550	4849	3204	3166	3488	3115
58	3026	2986	2419	1895	2716	1408	575	521	499	508	564	1446	4667	3023	3108	3431	3026
59	2916	2853	2204	1627	2273	1252	554	512	488	499	547	1335	4389	2794	3028	3355	2916

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60	2792	2708	1974	1360	1862	1105	535	503	477	490	532	1223	4007	2514	2916	3257	2792
61	2675	2545	1742	1092	1495	963	519	494	464	480	518	1106	3531	2192	2766	3139	2675
62	2559	2376	1524	886	1171	840	504	484	449	470	505	988	2959	1848	2583	3000	2559
63	2420	2186	1307	719	901	736	490	472	428	458	491	875	2364	1535	2360	2845	2420
64	2238	1979	1090	587	693	651	476	461	407	446	478	773	1811	1223	2106	2664	2238
65	2008	1750	903	483	549	585	463	449	399	434	465	684	1449	911	1831	2435	2008
66	1699	1493	739	409	452	533	449	436	393	421	451	609	1089	694	1557	2140	1699
67	1338	1236	601	355	391	494	436	421	387	406	438	550	728	533	1283	1815	1338
68	977	980	492	319	352	462	420	405	381	389	423	502	563	428	1009	1493	977
69	656	773	410	294	328	435	404	387	374	368	406	465	469	365	789	1171	656
70	421	594	352	275	311	411	386	366	366	346	388	435	417	328	607	850	421
71	294	452	309	259	297	388	368	346	355	326	369	409	388	304	463	599	294
72	237	350	279	247	287	366	347	325	342	307	347	386	368	288	375	421	237
73	211	280	255	234	276	342	323	306	324	290	321	363	350	273	314	308	211
74	197	239	233	220	265	318	293	284	306	270	291	339	329	257	269	255	197
75	185	215	210	205	252	293	256	266	284	254	258	315	307	240	230	227	185
76	176	201	187	189	236	268	223	248	262	237	228	289	282	219	200	212	176
77	167	190	166	171	218	242	193	227	238	220	196	262	255	194	177	205	167
78	157	181	147	153	198	215	163	205	212	199	160	233	227	172	157	203	157
79	143	166	129	138	176	186	136	182	184	176	132	200	198	151	136	199	143
80	133	144	111	123	153	154	114	157	157	153	110	166	168	132	113	190	133
81	121	122	94	109	130	125	95	132	131	128	92	134	137	112	95	175	121
82	93	98	75	92	109	101	79	105	105	102	76	101	110	88	75	150	93
83	59	70	54	74	89	72	64	79	79	76	60	69	87	67	53	115	59
84	36	45	39	58	71	56	49	57	54	53	45	51	66	50	35	77	36
85	18	26	25	43	54	43	34	34	29	32	31	38	48	37	21	44	18
86	5	10	13	29	38	32	21	14	10	13	19	27	31	24	11	14	5
87	0	0	4	16	22	21	11	4	5	5	9	17	16	11	2	0	0
88	0	0	0	5	5	5	4	3	3	4	3	3	1	2	0	0	0
89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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91	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
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
102	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0
103	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0
104	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0
105	0	0	0	0	1	1	1	2	1	1	1	0	0	0	0	0
106	0	0	0	0	2	1	2	2	2	1	1	0	1	0	0	0
107	0	0	0	0	2	1	2	2	2	2	1	0	1	0	0	0
108	0	0	0	1	3	2	2	2	2	2	1	1	1	1	0	0
109	0	0	0	1	3	2	2	2	2	2	2	1	2	1	0	0
110	0	0	0	1	3	2	2	2	2	2	2	1	2	1	0	0
111	0	0	0	1	4	3	3	2	2	2	2	1	3	1	0	0
112	0	0	0	1	4	3	3	2	3	2	2	2	3	1	0	0
113	0	0	0	2	4	3	3	3	3	3	2	2	4	2	0	0
114	0	0	0	2	4	3	3	3	3	3	3	2	4	2	0	0
115	0	0	0	2	5	4	3	3	3	3	3	3	5	2	0	0
116	0	0	0	2	5	4	4	3	3	3	3	3	5	2	0	0
117	0	0	0	2	5	4	4	3	4	3	3	3	5	2	0	0
118	0	0	0	3	5	4	4	3	4	3	3	3	5	3	0	0
119	0	0	0	3	5	4	4	4	4	4	4	3	6	3	0	0
120	0	0	0	3	5	4	4	4	4	4	4	4	6	3	0	0
121	0	0	0	3	5	5	5	5	5	5	4	4	6	3	0	0

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122	0	0	0	3	5	5	5	5	5	5	4	4	6	3	1	0	0
123	0	0	0	3	6	5	5	5	5	5	4	4	7	4	1	0	0
124	0	0	1	4	6	5	5	5	6	5	4	4	7	4	1	0	0
125	0	0	1	4	6	5	5	6	6	5	4	5	7	4	1	0	0
126	0	0	1	4	6	6	5	6	6	5	5	5	7	4	1	0	0
127	0	0	1	4	6	6	5	6	6	6	5	5	7	5	1	0	0
128	1	1	1	4	6	5	5	6	6	6	5	5	8	5	1	0	1
129	0	0	1	4	6	5	5	5	6	6	5	6	8	5	1	0	0
130	1	0	1	4	6	5	5	5	6	6	6	6	8	5	1	0	1
131	0	0	1	4	6	5	5	5	6	6	6	6	8	5	1	0	0
132	0	0	1	4	6	5	5	5	6	6	6	6	8	5	1	0	0
133	0	0	1	4	6	5	5	5	6	6	6	6	8	5	1	0	0
134	0	0	1	4	6	5	5	5	5	6	6	6	8	5	1	1	0
135	0	1	1	4	6	5	5	5	5	6	6	6	8	5	2	1	0
136	0	1	1	4	6	5	5	6	5	6	6	6	8	5	2	1	0
137	0	1	1	4	5	5	4	6	5	6	6	6	8	5	2	1	0
138	1	1	1	4	5	5	4	6	5	6	6	7	8	5	2	1	1
139	1	1	1	4	5	5	4	6	5	6	6	7	8	5	2	1	1
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141	1	1	1	4	5	5	4	5	5	6	6	7	8	5	2	1	1
142	1	1	1	4	5	5	4	5	5	6	6	7	8	5	2	1	1
143	1	1	1	4	5	5	4	5	5	6	6	7	8	5	2	1	1
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145	1	2	1	3	5	5	4	5	5	6	6	7	8	5	2	2	1
146	1	4	2	3	5	5	4	5	5	6	7	7	8	5	3	2	1
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150	2	2	2	3	5	5	4	5	5	6	7	6	7	4	3	2	2
151	2	2	2	3	4	4	4	5	5	6	7	6	7	4	3	2	2
152	2	2	2	3	4	4	4	5	5	6	7	6	6	4	4	2	2

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153	2	2	3	3	4	4	4	5	5	6	7	6	6	4	4	2	2
154	2	2	3	3	4	4	4	5	5	5	7	6	5	4	4	2	2
155	2	2	3	3	3	4	4	4	5	5	6	6	5	4	4	3	2
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159	3	3	3	3	3	3	4	4	4	4	5	5	4	4	4	3	3
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163	3	3	3	3	3	3	4	4	4	4	5	5	4	4	4	3	3
164	3	3	3	3	3	3	4	4	4	4	5	5	4	4	4	3	3
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172	4	4	5	3	4	4	4	5	5	5	6	6	5	4	5	4	4
173	4	4	5	3	4	4	4	5	5	6	5	6	5	4	5	4	4
174	4	4	5	3	4	4	4	5	5	5	5	6	5	4	5	4	4
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177	5	5	5	4	4	4	4	5	5	5	5	5	4	5	5	4	5
178	5	5	5	4	4	4	4	5	4	5	5	5	4	5	5	4	5
179	5	5	5	4	4	4	4	4	4	5	5	5	4	4	5	4	5
180	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

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<b>2.2 Electrical, Photometric and Chromaticity Measurements</b> <i>(Refer to Work Instruction QD25)</i>	<b>IES LM-79 2008</b>
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<b>Test date</b>	2016-01-30	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	AOK-75WiT-HV(5700K)		

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE151161	277.0	60	0.2758	74.89	0.9802	6.81
-G2	480.0	60	0.1680	74.79	0.9277	12.72

**Sphere-Spectroradiometer Method:**

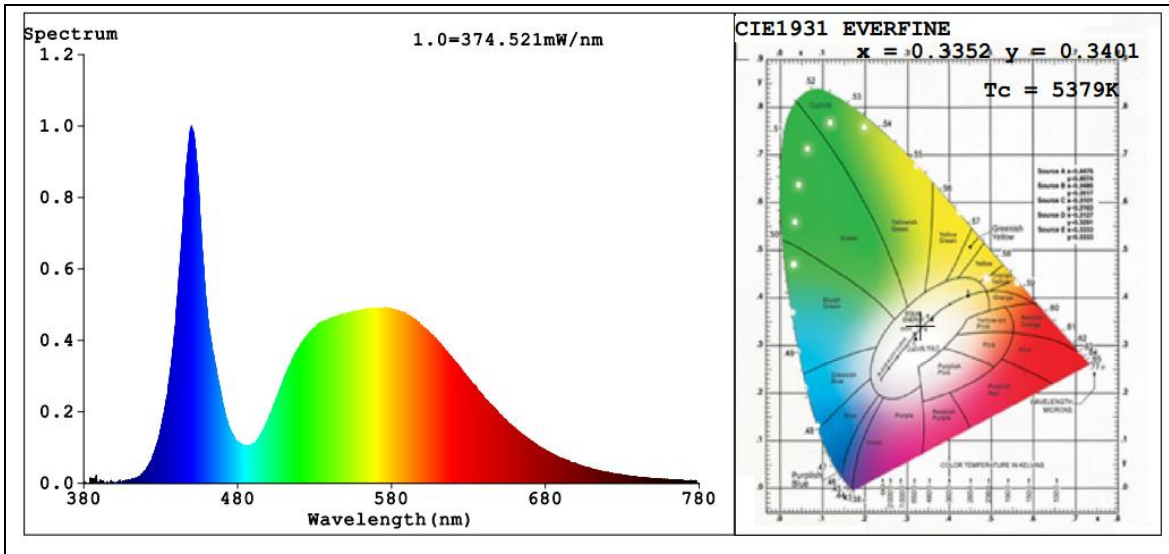
Parameter	Result
Test Voltage (V)	277.0
Frequency (Hz)	60
Color Rendering Index (CRI)	76.4
R9	0
CCT (K)	5379
Chromaticity (x, y)	x=0.3352 y=0.3401
Chromaticity (u', v')	u'=0.2091 v'=0.4774
Duv	-0.0017
Total Luminous (lm)	10536
Luminous Efficacy (lm/W)	140.69

Special Color Rendering Indices			
R1	76	R9	0
R2	81	R10	52
R3	82	R11	75
R4	77	R12	46
R5	76	R13	76
R6	72	R14	90
R7	83	R15	72
R8	64	--	--

**Sphere-Spectroradiometer Method:**

Parameter	Result
Test Voltage (V)	480.0
Frequency (Hz)	60
Total Initial Lumen Output(lm)	10548
Initial Lumen Efficacy(lm/w)	141.03

**Spectral Power Distribution & Chromaticity Diagram**



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**3. Test Equipment**

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2015-07-01	2016-06-30
ST-R-331	Spectral analysis system HAAS-2000	2015-07-01	2016-06-30
D204	Standard Lamp	2015-07-01	2016-06-30
PF2010	Power Meter for Integrating Sphere	2015-07-01	2016-06-30
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
ST-R-181A	Temperature Tester	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 \*\*\*\*\***