



Ningbo TengLi Testing Co., Ltd

2nd floor, Block B, Ningbo Testing and Certification Base, No. 66
Qingyi Road, Ningbo National Hi-Tech Zone, Ningbo, Zhejiang
Tel: 86574-8783 6802
Fax: 86574-8783 5902

LM-79-08 Test Report

For

Antec Lighting Inc

(Brand Name: **AOK**)
Quality, Honesty, Service and Innovation

Uniy C, 3979 E Guasti Road, Ontario, CA 91761

Model name(s):

AOK-115WiE-NV-LV2-XX-XX70-T302-P

Report Type: Testing and Report According to IES LM-79-2008
Type of Luminaire: Outdoor Pole/Arm-Mounted Area and Roadway Luminaires
Report Date: 2019-04-16
Ningbo TengLi Testing Co., Ltd
Prepared By: 2nd floor, Block B, Ningbo Testing and Certification Base,
No. 66 Qingyi Road, Ningbo National Hi-Tech Zone,
Ningbo, Zhejiang

Test & Report By:

Xeon Ren

Engineer: Xeon Ren

Review By:

Johnson Sun

Manager: Johnson Sun

Note: 1. The results contained in this report pertain only to the tested samples

2. This report does not imply product certification, approval, or endorsement by A2LA, or any agency of the Federal Government.



1.1 Product Information:		
Model Number	AOK-115WiE-NV-LV2-XX-XX70-T302-P	
Remark	The first “XX” can be “00” =no photocontrol or “PH”=photocontrol provided. The second “XX” could be 27/30/35/40/45/50/57 refers to CCT. This is multiple listed report, the Project Number of the original report is JAE190121-G-R1	
Representative (Tested) Model	AOK-115WiE-NV-LV2-00-2770-T302-P	
Model Difference	All construction and rating are the same, except CCT	
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	
LED Manufacturer	Lumileds	
LED Model	LUXEON V Family	
Dimming	Dimmable	
Sample Number	JAE190121-G1	
Date of Receipt	Feb.23, 2019	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

1.2 Rated Values:	
Rated Voltage / Frequency	100-277Vac, 50/60Hz
Nominal Power	115W
Rated Initial Lamp Lumen	--
Declared CCT	2700K,3000K,3500K,4000K,4500K,5000K, 5700K



1.3 Test Specifications:

Test item	1. Total Luminous Flux 2. Luminous Distribution Intensity 3. Luminous Efficacy 4. Electrical Parameters
Reference Standard	1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products 2. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	QD25

1.4 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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, 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 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° vertical intervals and 22.5° horizontal intervals.

2) 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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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 Summary of Test Result

Criteria Item	Measured Value			Compliance	Requirement (DLC V4.4)	
Power (W)	2700K	120V	116.5	N/A	N/A	
		277V	115.4			
Power Factor	2700K	120V	0.9935	Pass	$\geq 0.9(-3\%)$	
		277V	0.8735			
THD %	2700K	120V	5.70	Pass	$\leq 20(+5)$	
		277V	8.42			
Luminous Intensity Distribution	Zonal lumens in the 0-90 °		100	Pass	$\geq 100(-1)$	
	Zonal lumens in the 80-90 °		0.5	Pass	$\leq 10(+3)$	
Total Luminous	2700K	120V	14939	Pass	$\geq 1000(-10\%)$	
		277V	15020			
Luminous Efficacy	2700K	120V	128.23	Pass	Standard: $\geq 90(-3\%)$	Premium: $\geq 110(-3\%)$
		277V	130.16			



2.2 Electrical, Photometric and Chromaticity Measurements

Test date	2019-02-25	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	AOK-115WiE-NV-LV2-00-2770-T 302-P		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
JAE190121-G1	120.0	60	0.9772	116.5	0.9935	5.70
	277.0	60	0.4769	115.4	0.8735	8.42

Photometric Measurement – Goniophotometer Method:

Parameter	Result	
Test Voltage (V)	120.0	277.0
Frequency (Hz)	60	60
Total Luminous (lm)	14939	15020
Luminous Efficacy (lm/W)	128.23	130.16
Zonal lumens in the 0-90 °	100	--
Zonal lumens in the 80-90 °	0.5	--
Beam Angle (°)	106.2	--
Center Beam Candle Power (cd)	3094	--

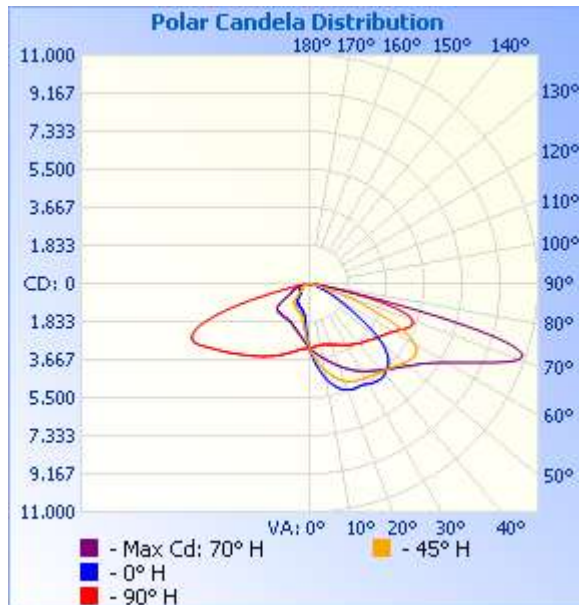


Zonal Lumen Tabulation

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	2,753.1	18.4%
0-40	4,942.8	33.1%
0-60	10,658.7	71.3%
60-90	4,280.4	28.7%
70-100	1,446.3	9.7%
90-120	0	0%
0-90	14,939.1	100%
90-180	0	0%
0-180	14,939.1	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	290.8	1.9%	90-100	0	0%
10-20	904.1	6.1%	100-110	0	0%
20-30	1,558.2	10.4%	110-120	0	0%
30-40	2,189.7	14.7%	120-130	0	0%
40-50	2,721.8	18.2%	130-140	0	0%
50-60	2,994.1	20.0%	140-150	0	0%
60-70	2,834.1	19.0%	150-160	0	0%
70-80	1,374.6	9.2%	160-170	0	0%
80-90	71.7	0.5%	170-180	0	0%

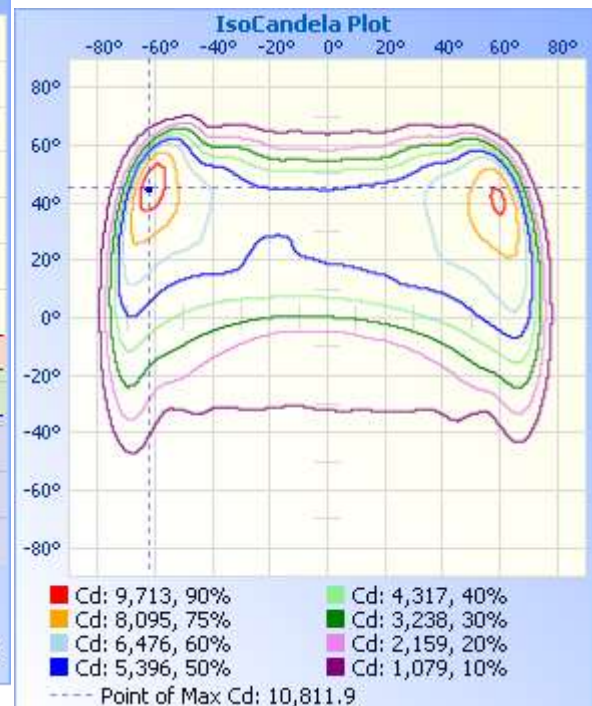
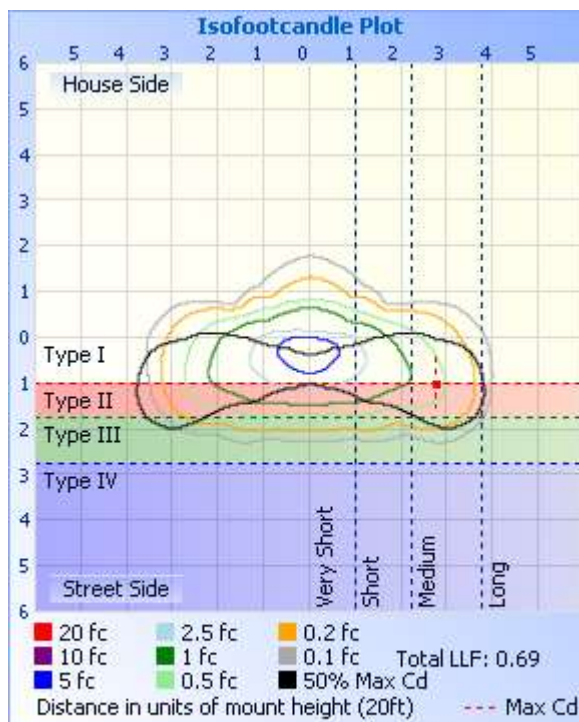
Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width
3.3ft	284.1 fc	3.3 ft 4.2 ft
6.6ft	71.0 fc	6.5 ft 8.5 ft
9.9ft	31.6 fc	9.8 ft 12.7 ft
13.2ft	17.8 fc	13.0 ft 17.0 ft
16.5ft	11.4 fc	16.3 ft 21.2 ft
19.8ft	7.9 fc	19.6 ft 25.5 ft

■ Vert. Spread: 52.6°
■ Horiz. Spread: 65.5°





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Table--1

UNIT: *10cd

C (DEG) T (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
5	314	323	331	339	346	353	359	365	371	376	381	385	388	391	393	394	395	396	397
10	325	343	357	370	384	397	408	417	426	435	443	448	452	457	460	462	463	465	466
15	342	367	387	407	426	443	457	467	478	488	495	500	504	508	511	513	514	516	518
20	362	392	417	441	465	485	499	509	519	529	534	536	539	541	542	543	543	544	544
25	382	417	445	473	501	522	533	539	546	552	554	554	554	554	554	553	552	551	550
30	404	442	474	506	537	557	563	563	564	564	562	560	558	555	554	555	556	557	558
35	427	468	502	536	570	590	590	586	582	578	576	574	571	569	569	569	570	570	571
40	452	495	532	569	605	624	620	611	603	594	589	585	582	578	574	572	570	567	565
45	480	526	565	604	643	661	653	640	628	615	604	594	584	574	566	558	551	544	537
50	514	563	606	649	691	708	695	678	660	643	618	593	568	543	523	509	495	480	466
55	551	608	659	709	758	773	748	719	690	660	607	550	495	440	401	379	359	338	317
60	598	668	731	794	855	861	806	746	686	626	547	464	381	298	248	229	212	195	178
65	625	716	802	887	970	956	837	710	585	464	390	320	250	180	138	127	117	107	95.1
70	533	635	737	842	946	921	758	583	407	236	187	148	109	68.9	47.7	45.8	45.2	44.5	43.7
75	243	257	268	280	298	284	234	175	112	46.1	39.5	37.1	34.8	31.9	30.4	29.8	29.2	28.7	28.0
80	45.8	45.7	45.0	44.0	42.7	39.8	35.2	30.0	24.3	18.1	18.1	18.4	18.7	18.9	18.7	18.0	17.3	16.5	15.8
85	2.12	2.66	3.21	3.77	4.34	4.73	4.95	5.13	5.26	5.37	5.75	6.14	6.53	6.88	6.93	6.66	6.36	6.04	5.68
90	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	0.00
95	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	0.00
100	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	0.00
105	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	0.00
110	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	0.00
115	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	0.00
120	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	0.00
125	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	0.00
130	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	0.00
135	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	0.00
140	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	0.00
145	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	0.00
150	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	0.00
155	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	0.00
160	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	0.00
165	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	0.00
170	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	0.00
175	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	0.00
180	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	0.00



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Table--2

UNIT: *10ed

C (DEG) T (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
5	395	393	392	389	386	383	379	374	369	363	357	351	343	336	328	321	312	304	295
10	463	460	457	454	449	443	437	430	421	411	400	390	377	363	348	333	318	300	283
15	514	510	506	502	496	490	483	476	466	453	440	427	411	392	371	350	328	303	276
20	541	538	535	532	527	521	515	508	499	487	475	462	446	423	397	370	343	312	278
25	549	548	547	545	541	536	530	524	517	509	501	492	479	455	424	392	360	325	285
30	555	551	548	545	541	537	533	529	526	523	521	518	510	486	451	415	380	341	296
35	566	561	557	552	548	545	541	538	536	537	539	540	536	513	475	436	398	357	308
40	564	562	561	559	557	555	553	551	550	555	561	566	567	543	502	460	418	374	322
45	540	544	548	552	555	557	560	563	567	576	586	596	600	577	531	484	438	389	334
50	477	488	499	510	524	541	558	576	594	607	620	633	641	617	566	515	463	410	350
55	334	350	367	385	418	467	516	566	613	635	656	678	694	671	612	553	494	433	364
60	193	207	220	236	282	359	436	513	587	635	683	733	776	759	687	614	540	464	375
65	106	115	125	135	173	238	303	367	435	548	665	784	895	900	805	708	610	510	403
70	44.8	45.9	46.9	49.0	68.7	105	142	178	227	427	635	844	1042	1071	937	800	664	529	414
75	29.0	29.9	30.7	31.7	34.5	38.9	43.1	47.2	62.5	239	415	585	741	759	661	562	471	388	299
80	16.8	17.8	18.8	19.8	20.3	20.3	20.4	20.4	21.3	37.8	53.8	68.9	83.1	91.6	94.3	95.8	96.4	92.1	73.5
85	6.26	6.82	7.34	7.84	8.02	7.88	7.72	7.54	7.45	8.55	9.58	10.4	11.0	10.7	9.45	8.21	6.97	5.76	4.98
90	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	0.00
95	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	0.00
100	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	0.00
105	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	0.00
110	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	0.00
115	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	0.00
120	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	0.00
125	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	0.00
130	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	0.00
135	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	0.00
140	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	0.00
145	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	0.00
150	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	0.00
155	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	0.00
160	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	0.00
165	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	0.00
170	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	0.00
175	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	0.00
180	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	0.00



Certificate#4703.02

Ningbo TengLi Testing Co., Ltd

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Table--3

UNIT: *10ed

C (DEG) Y (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
5	286	278	270	262	254	246	239	233	227	221	216	212	210	208	206	205	203	205	208
10	265	247	231	217	203	189	177	169	164	160	156	152	151	150	149	149	148	150	151
15	249	222	201	185	173	161	150	143	140	138	136	134	133	133	133	133	133	134	135
20	243	209	182	166	157	148	139	134	131	129	127	126	125	125	125	125	125	126	127
25	245	206	173	156	148	141	134	128	125	123	121	119	118	118	117	117	117	118	120
30	252	207	169	149	142	135	129	123	120	117	114	112	111	110	110	110	110	111	112
35	260	212	169	147	139	132	125	118	114	111	107	103	101	101	101	101	101	101	102
40	270	218	170	145	136	128	119	111	104	96.5	89.1	82.1	77.9	76.2	74.8	73.4	72.0	72.7	73.5
45	278	222	171	140	126	112	98.3	85.4	78.5	72.0	65.8	60.0	57.0	56.6	56.4	56.1	55.9	55.7	55.5
50	289	228	170	132	111	90.6	69.8	52.1	51.1	51.1	51.0	51.1	51.5	52.3	53.0	53.8	54.6	53.6	52.6
55	294	224	158	116	97.0	78.6	60.5	44.9	45.3	46.3	47.3	48.3	49.3	50.3	51.3	52.3	53.4	52.0	50.7
60	285	195	109	64.2	56.7	50.3	44.4	39.6	40.6	41.8	43.0	44.2	45.7	47.4	49.1	50.7	52.4	50.4	48.4
65	295	187	84.5	35.0	34.0	34.0	34.0	34.2	35.4	36.7	37.9	39.1	40.1	40.8	41.5	42.2	42.8	41.8	40.7
70	301	188	79.8	27.6	27.0	27.2	27.3	27.5	27.6	27.7	27.8	27.9	28.0	28.0	28.1	28.2	28.3	27.8	27.4
75	215	133	56.4	19.1	18.3	18.1	17.9	17.7	17.0	16.3	15.6	14.9	14.3	13.8	13.3	12.9	12.4	12.6	12.7
80	53.2	34.4	17.6	9.64	9.09	8.77	8.46	8.06	6.59	5.08	3.52	2.01	1.30	1.04	0.79	0.52	0.25	0.00	0.75
85	4.13	3.36	2.67	2.18	1.85	1.52	1.22	0.92	0.69	0.48	0.30	0.11	0.04	0.03	0.01	0.01	0.00	0.00	0.01
90	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	0.00
95	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	0.00
100	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	0.00
105	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	0.00
110	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	0.00
115	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	0.00
120	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	0.00
125	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	0.00
130	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	0.00
135	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	0.00
140	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	0.00
145	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	0.00
150	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	0.00
155	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	0.00
160	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	0.00
165	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	0.00
170	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	0.00
175	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	0.00
180	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	0.00



Table--4

UNIT: *10ed

C (DEG) T (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355			
0	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309			
5	210	213	216	221	227	233	240	246	254	262	271	280	288	297	306			
10	153	155	158	162	168	174	181	190	205	222	238	255	272	290	308			
15	137	138	140	144	148	152	157	167	183	199	216	235	259	287	315			
20	129	130	132	135	139	143	147	157	170	185	199	220	251	288	325			
25	121	122	124	128	132	135	139	149	161	173	186	209	247	292	337			
30	113	114	116	120	123	127	132	141	153	165	177	203	248	300	352			
35	103	104	106	111	115	120	125	135	147	159	171	200	252	310	369			
40	74.3	75.3	79.9	88.1	96.9	106	114	127	140	154	167	201	259	324	388			
45	55.3	55.3	57.8	62.9	68.6	74.4	81.0	99.4	120	140	161	202	268	339	410			
50	51.6	50.6	49.9	49.5	49.2	48.9	49.8	72.3	98.9	126	153	202	277	356	436			
55	49.4	48.1	46.9	45.8	44.7	43.6	43.3	62.1	84.1	106	130	184	273	366	459			
60	46.3	44.3	42.6	41.4	40.2	38.9	38.0	43.2	49.7	56.6	65.1	124	239	359	479			
65	39.6	38.6	37.4	36.2	35.0	33.7	32.5	32.4	32.5	32.5	33.9	94.9	222	356	490			
70	26.9	26.5	26.2	26.1	25.9	25.8	25.7	25.6	25.5	25.4	26.1	77.8	186	299	415			
75	12.8	13.1	13.4	14.1	14.7	15.3	15.9	16.1	16.3	16.4	17.0	39.2	85.4	136	189			
80	0.97	1.21	1.80	3.03	4.30	5.54	6.75	7.05	7.28	7.51	7.84	11.3	18.5	26.8	35.8			
85	0.02	0.03	0.06	0.18	0.28	0.40	0.55	0.72	0.90	1.09	1.30	1.48	1.64	1.80	1.98			
90	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			
95	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			
100	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			
105	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			
110	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			
115	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			
120	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			
125	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			
130	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			
135	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			
140	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			
145	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			
150	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			
155	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			
160	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			
165	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			
170	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			
175	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	0.00	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			



2.4 Performance Assessment:

Model name	CCT(K)	Total Luminous (lm)	Power (W)	Luminous Efficacy (lm/W)
AOK-115WiE-NV-LV2-00-2770-T302-P	2700K	14939	116.5	128.23
AOK-115WiE-NV-LV2-00-3070-T302-P	3000K	15022	116.5	128.95
AOK-115WiE-NV-LV2-00-3570-T302-P	3500K	15161	116.5	130.14
AOK-115WiE-NV-LV2-00-4070-T302-P	4000K	15299	116.5	131.32
AOK-115WiE-NV-LV2-00-4570-T302-P	4500K	15430	116.5	132.45
AOK-115WiE-NV-LV2-00-5070-T302-P	5000K	15568	116.5	133.63
AOK-115WiE-NV-LV2-00-5770-T302-P	5700K	15653	116.5	134.36

According to the test report JAE190121-A-R

Scaled Methodology Explanation:

$18W\ 3000K\ eff / 18W\ 2700K\ eff = 132.02 / 131.29 = 1.0056$

$18W\ 3500K\ eff / 18W\ 2700K\ eff = 133.24 / 131.29 = 1.0149$

$18W\ 4000K\ eff / 18W\ 2700K\ eff = 134.45 / 131.29 = 1.0241$

$18W\ 4500K\ eff / 18W\ 2700K\ eff = 135.61 / 131.29 = 1.0329$

$18W\ 5000K\ eff / 18W\ 2700K\ eff = 136.82 / 131.29 = 1.0421$

$18W\ 5700K\ eff / 18W\ 2700K\ eff = 137.56 / 131.29 = 1.0478$

$3000K\ eff = 2700K\ eff * 1.0056$

$3500K\ eff = 2700K\ eff * 1.0149$

$4000K\ eff = 2700K\ eff * 1.0241$

$4500K\ eff = 2700K\ eff * 1.0329$

$5000K\ eff = 2700K\ eff * 1.0421$

$5700K\ eff = 2700K\ eff * 1.0478$



3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-714	Goniophotometer system	Verified by D908S standard lamp	
ST-R-710	Standard Lamp	2019-02-12	2020-02-11
ST-R-711	Power Meter for Goniophotometer	2019-01-06	2020-01-05
Uncertainty: Photometric Measurement(Goniophotometer):1.62%			

4. Product Photo



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