

LM-79-08 Test Report

For

Antec Lighting Inc

(Brand Name: )

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

Architectural Flood and Spot Luminaires

Model name(s): AOK-750WoF-HV-L5-XX-XX70-30-P

Remark: The first "XX" can be "00" for without sensor or "PH" for Plug-In photocontrol, The last "XX" represents different CCT as below: 30=3000K, 40=4000K, 50=5000K, 57=5700K, "P" represents mounting option which can be as following: A; B; C

Representative (Tested) Model: AOK-750WoF-HV-L5-00-3070-30-C

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

Test & Report By:

Garman Mo

Engineer: Garman Mo

Date: Nov.18,2019

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:

Organization Name	Antec Lighting Inc	
Brand Name		
Model Number	AOK-750WoF-HV-L5-XX-XX70-30-P	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Architectural Flood and Spot Luminaires	
Rated Voltage / Frequency	277-480Vac, 50/60Hz	
Nominal Power	750W	
Rated Initial Lamp Lumen	--	
Declared CCT	3000K,4000K,5000K,5700K	
LED Manufacturer	Lumileds	
LED Model	LUXEON 5050	
Sample Number	JAE191009-B1	
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	Nov.13,2019
Date of Test	Nov.14,2019
Test item	<ol style="list-style-type: none"> 1. Total Luminous Flux 2. Luminous Distribution Intensity 3. Luminous Efficacy 4. Electrical Parameters
Reference Standard	<ol style="list-style-type: none"> 1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products 2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products 3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources 4. CIE 15-2004 Technical Report Colorimetry 5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source 6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems

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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, 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 Electrical, Photometric and Chromaticity Measurements

Test date	2019-11-14	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	60
Model Number	AOK-750WoF-HV-L5-00-3070 -30-C	Total Operating Time (min)	90

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
JAE191009-B1	277.0	60	2.756	760.5	0.9963	3.61
	480.0	60	1.642	751.3	0.9534	7.72
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

Photometric Measurement – Goniophotometer Method(Test Distance: 26.000m):

Parameter	Result		DLC V4.4 Pass Criteria	
Test Voltage (V)	277.0	480.0	--	
Frequency (Hz)	60	60		
Total Luminous (lm)	111539	112269	>=1000 (-10%)	
Luminous Efficacy (lm/W)	146.67	149.43	Standard: >= 100(-3%)	Premium: >= 120(-3%)
Zonal lumens in the 0-90 °zone (%)	99.6	--	>= 85(-3)	
Beam Angle (°)	35.7	--	--	
Center Beam Candle Power (cd)	209462	--	--	

Zonal Lumen Tabulation

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	79,816.0	71.6%
0-40	94,761.5	85%
0-60	107,175.5	96.1%
60-90	3,913.9	3.5%
70-100	1,333.6	1.2%
90-120	34.1	0%
0-90	111,089.5	99.6%
90-180	401.8	0.4%
0-180	111,491.3	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	18,173.0	16.3%	90-100	7.1	0%
10-20	35,514.4	31.9%	100-110	10.1	0%
20-30	26,128.6	23.4%	110-120	16.8	0%
30-40	14,945.4	13.4%	120-130	32.3	0%
40-50	7,947.0	7.1%	130-140	57.2	0.1%
50-60	4,467.1	4.0%	140-150	86.0	0.1%
60-70	2,587.5	2.3%	150-160	94.8	0.1%
70-80	1,166.3	1.0%	160-170	69.5	0.1%
80-90	160.1	0.1%	170-180	27.9	0%

Photometric Data

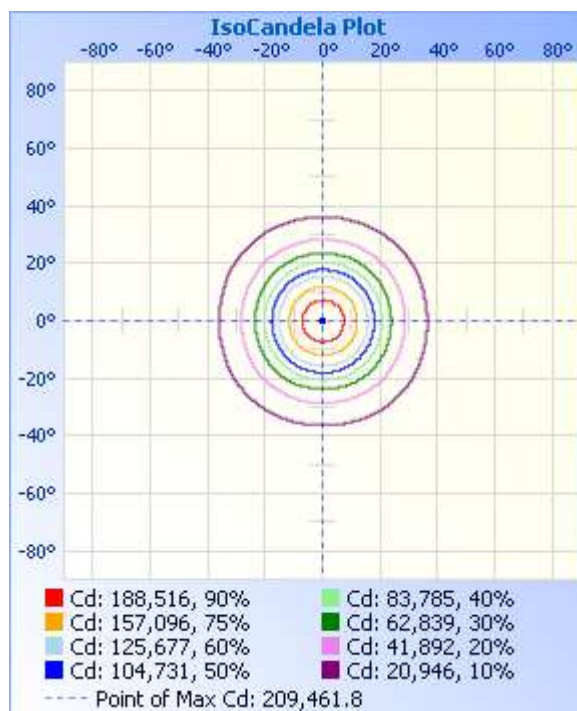
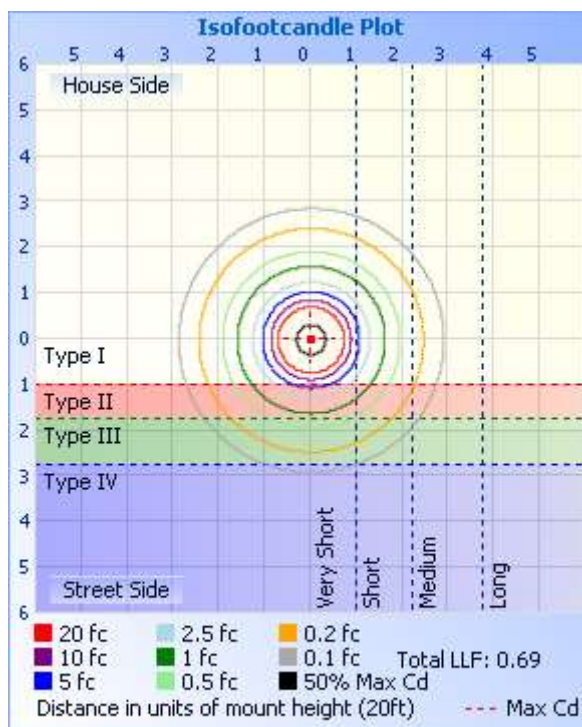
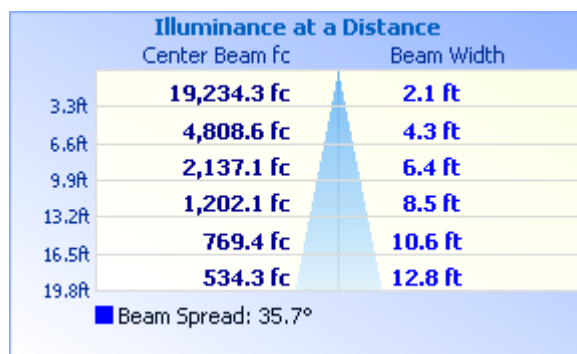
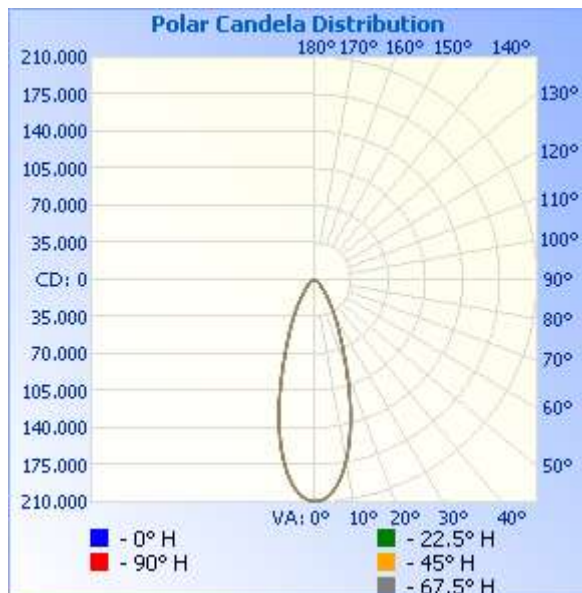


Table--1 UNIT: ×100cd

C (DEG) Y (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	
0	2095	2095	2095	2095	2095	2095	2095	2095	2095	2095	2095	2095	2095	2095	2095	2095	
5	1995	1999	2004	2008	2010	2010	2009	2006	2004	2000	1995	1989	1987	1986	1988	1990	
10	1709	1717	1726	1735	1739	1740	1738	1734	1729	1720	1713	1702	1700	1697	1701	1703	
15	1295	1305	1316	1325	1331	1333	1330	1324	1319	1309	1296	1286	1283	1280	1281	1286	
20	857	866	875	884	889	891	889	882	879	869	860	852	848	846	848	851	
25	552	558	563	569	573	575	572	569	566	560	555	550	547	546	548	550	
30	360	364	368	371	373	375	374	372	372	369	366	362	359	359	361	362	
35	230	232	234	237	238	239	239	237	236	234	231	228	227	227	227	229	
40	150	151	152	154	155	155	155	155	152	150	148	147	146	146	147	147	
45	99.6	101	101	102	102	103	104	103	102	101	99.5	99.0	98.2	98.2	99.0	98.9	
50	69.9	69.8	70.3	71.0	72.0	71.4	72.0	71.7	71.4	70.4	69.4	68.6	68.8	68.1	68.4	68.7	
55	48.5	49.1	49.7	49.7	49.8	50.0	50.3	50.4	49.6	49.5	48.8	48.1	47.7	47.9	47.9	48.2	
60	35.0	35.6	35.8	35.8	35.7	36.1	36.2	36.2	35.6	35.6	35.2	34.7	34.5	34.7	34.6	35.0	
65	25.9	26.4	26.4	26.4	26.3	26.6	26.5	26.7	26.1	26.1	25.6	25.4	25.2	25.2	25.3	25.6	
70	17.9	18.1	18.4	18.2	18.4	18.3	18.5	18.4	18.2	18.0	17.8	17.4	17.3	17.3	17.5	17.6	
75	10.7	11.0	11.2	11.1	11.1	11.2	11.3	11.2	11.0	11.0	10.8	10.5	10.3	10.3	10.6	10.6	
80	4.82	5.02	5.09	5.08	5.01	5.13	5.16	5.16	5.06	5.04	4.84	4.66	4.46	4.54	4.62	4.79	
85	0.98	0.95	0.83	1.06	1.11	1.12	0.92	1.01	1.08	0.91	0.73	0.81	0.76	0.76	0.70	0.86	
90	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.06	0.07	0.07	
95	0.07	0.07	0.07	0.07	0.06	0.06	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
100	0.08	0.08	0.08	0.08	0.07	0.07	0.08	0.08	0.07	0.06	0.06	0.07	0.07	0.06	0.07	0.07	
105	0.10	0.10	0.10	0.09	0.09	0.09	0.10	0.10	0.09	0.08	0.09	0.08	0.08	0.08	0.09	0.10	
110	0.15	0.14	0.14	0.13	0.13	0.13	0.14	0.14	0.12	0.11	0.12	0.12	0.12	0.11	0.13	0.14	
115	0.20	0.19	0.18	0.16	0.17	0.15	0.19	0.19	0.17	0.16	0.16	0.16	0.16	0.12	0.18	0.19	
120	0.27	0.27	0.26	0.20	0.17	0.20	0.26	0.26	0.24	0.22	0.25	0.21	0.18	0.17	0.25	0.25	
125	0.38	0.39	0.36	0.37	0.38	0.35	0.34	0.38	0.32	0.32	0.35	0.37	0.36	0.31	0.37	0.37	
130	0.54	0.55	0.47	0.53	0.54	0.51	0.45	0.53	0.48	0.50	0.50	0.59	0.53	0.46	0.53	0.54	
135	0.78	0.80	0.63	0.78	0.79	0.75	0.61	0.74	0.72	0.74	0.69	0.86	0.75	0.69	0.68	0.80	
140	1.14	1.16	0.69	1.08	1.07	1.09	0.75	1.04	1.06	1.06	0.89	1.25	1.02	1.03	0.73	1.17	
145	1.59	1.56	0.89	1.45	1.15	1.50	1.12	1.43	1.48	1.44	1.06	1.70	1.11	1.39	1.25	1.58	
150	2.05	1.88	1.16	1.72	1.99	1.99	1.37	1.88	1.90	1.84	1.01	2.19	1.95	1.84	1.79	1.83	
155	2.41	2.15	1.61	1.93	2.37	2.36	1.65	2.34	2.27	2.22	1.43	2.64	2.13	1.93	1.89	1.62	
160	2.57	2.31	2.21	2.11	2.64	2.55	2.15	2.52	2.55	2.52	2.24	2.81	2.73	2.45	1.57	1.82	
165	2.75	2.45	2.48	1.90	2.41	2.13	2.52	2.64	2.72	2.67	2.42	2.61	2.40	2.27	1.74	2.46	
170	2.86	2.74	2.68	2.52	2.48	2.67	2.96	2.94	2.96	2.94	2.84	2.74	3.11	2.70	2.53	2.92	
175	2.98	2.93	2.76	2.84	3.08	2.81	3.14	3.09	3.03	3.04	3.02	2.92	3.15	3.18	2.75	3.08	
180	2.88	2.95	2.75	2.91	2.98	2.65	3.03	2.94	2.87	2.88	2.94	2.75	2.89	2.98	2.63	3.02	

3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-355	Goniophotometer system	Verified by D908S standard lamp	
ST-R-359	Standard Lamp	2019-07-03	2020-07-02
ST-R-358	Power Meter for Goniophotometer	2019-06-27	2020-06-26
Expand Uncertainty: Photometric Measurement(Goniophotometer):2.76%, k=2			

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