

# AFX, INC.

# TEST REPORT

## SCOPE OF WORK

Electrical and Photometric tests as required to the IESNA test standard.

**MODEL NUMBER**  
ALV370535LAJD2

**REPORT NUMBER**  
103792309CHI-004

**ISSUE DATE**  
February 26, 2019

**REVISION DATE**  
None

**DOCUMENT CONTROL NUMBER**  
TBD  
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**REPORT NO.:103792309CHI-004**  
**REPORT DATE: February 26, 2019**

**TEST REPORT**

TEST OF ONE 3' LINEAR AMBIENT LUMINAIRE

MODEL NO. ALV370535LAJD2  
LED MODEL NO. SAMSUNG LM281B  
DRIVER MODEL NO. KEYSTONE KTLD-40-UV-1100-VDIM-L2

**RENDERED TO:**

AFX, INC.  
2345 N. ERNIE KRUEGER CIRCLE  
WAUKEGAN, IL 60087-3225

**AUTHORIZATION**

The testing performed was authorized by signed quote number Qu-00935446-0.

**STANDARDS USED**

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

**DESCRIPTION OF SAMPLE**

The client submitted one production sample of model number ALV370535LAJD2. The sample was received by Intertek on February 11, 2019 in undamaged condition and one sample was tested as received. The sample designation was AH02112019033354-01B.

**DATE OF TESTS**

February 26, 2019.

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**TEST REPORT**

**SUMMARY**

<b>MODEL NO:</b>	ALV370535LAJD2
<b>DESCRIPTION:</b>	3' Linear Ambient Luminaire

CRITERIA	RESULTS
Lumen Output (lumens)	2333.0
Input Power (W) @ 120 (VAC)	29.25
Lumen Efficacy (lm/W)	79.8
Input Power Factor @ 120 (VAC)	0.987

**EQUIPMENT LIST**

EQUIPMENT USED	MODEL NO.	CONTROL NO.	LAST CAL DATE	CAL DUE DATE
Yokogawa Power Meter	WT210	146919	7/9/2018	7/9/2019
Omega Thermometer	DPI8-C24	146920	10/4/2018	10/4/2019
LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU
Newport Thermohygrometer	iServer	146379	4/16/2018	4/16/2019
Pacific, AC power supply	118-ACX	CHI0358	VBU	VBU

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**TEST METHODS**

**SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS**

No seasoning was performed in accordance with IESNA LM-79.

**PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD**

A Type C Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for the SSL sample.

Ambient temperature was measured equal to the height of the sample mounted on the goniometer equipment. The SSL sample was operated on the client provided driver at rated input volts in its designated orientation. The SSL sample was allowed to stabilize for at least thirty minutes before measurements were made. Stabilization procedures to LM-79 were followed. Electrical measurements including voltage, current, and power were measured using a power analyzer.

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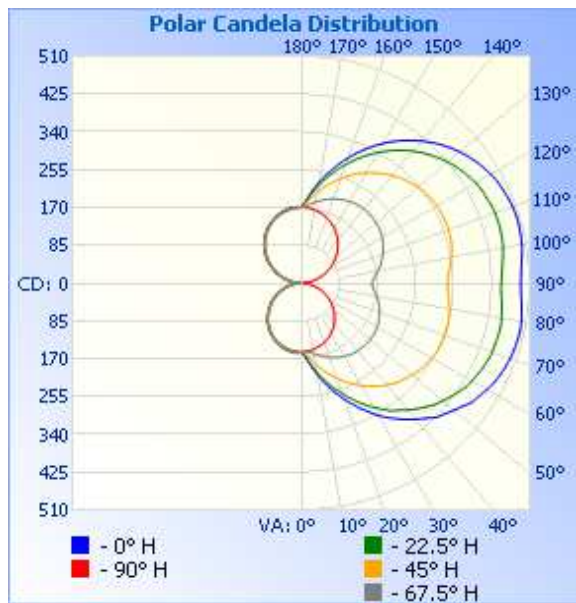
**RESULTS OF TESTS**

**PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)**

INTERTEK CONTROL NO.	BASE POSITION	INPUT VOLTAGE (VAC)	INPUT CURRENT (mA)	INPUT POWER (W)	INPUT POWER FACTOR	LIGHT OUTPUT (lm)	LUMEN EFFICACY (lm/W)
AH02112019033354-01B	Horizontal	120.2	246.5	29.25	0.987	2333.0	79.8

**INTENSITY SUMMARY - CANDELAS**

Angle	0	22.5	45	67.5	90
0	156	156	156	156	156
5	176	174	164	155	153
10	208	203	184	161	152
15	242	233	205	169	148
20	277	263	227	177	144
25	310	293	247	184	139
30	344	322	266	190	132
35	373	350	283	195	124
40	399	372	299	198	116
45	427	393	312	199	106
50	445	412	322	199	95
55	466	427	331	199	84
60	479	440	337	196	73
65	489	448	341	192	60
70	496	454	341	186	48
75	500	455	340	179	36
80	499	454	336	172	24
85	494	449	330	163	12
90	490	446	326	158	4
95	493	451	332	164	12
100	500	458	340	176	24
105	503	461	347	185	38
110	502	461	350	194	51
115	497	456	351	202	65
120	489	451	350	209	79
125	477	439	344	213	92
130	460	425	338	216	105
135	441	408	328	218	116
140	417	388	317	218	127
145	391	364	302	216	137
150	362	339	286	213	146
155	331	311	269	208	153
160	298	282	249	202	159
165	264	253	229	194	164
170	230	223	207	185	168
175	196	193	186	176	170
180	171	171	171	171	171



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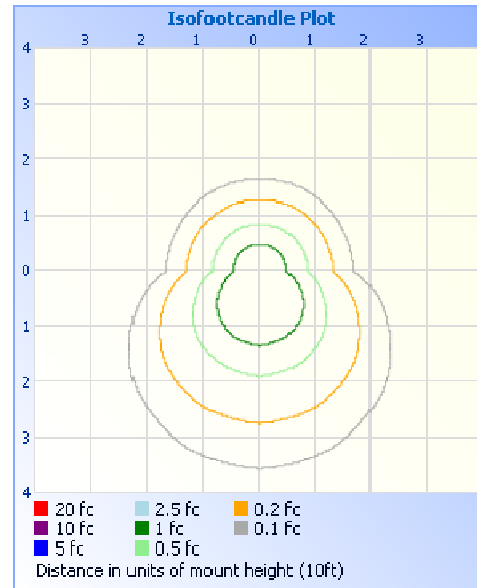
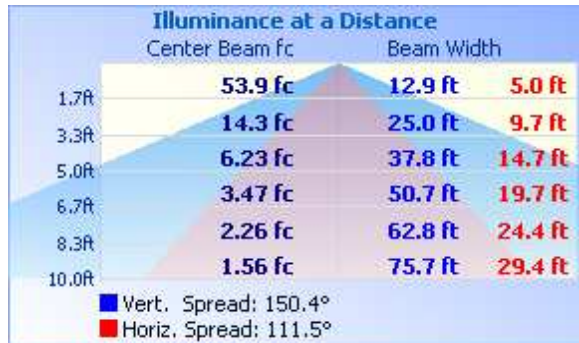
**TEST REPORT**

**RESULTS OF TESTS**

**PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)**

**MOUNTING HEIGHT: 10ft**

ILLUMINANCE - CONE OF LIGHT	ISOILLUMINATION PLOT
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**ZONAL LUMEN SUMMARY AND PERCENTAGES**

ZONE	LUMENS	% LUMINAIRE
0-30	152.6	6.5
0-40	276.0	11.8
0-60	604.6	25.9
60-90	535.4	22.9
70-100	520.3	22.3
90-120	546.5	23.4
0-90	1140.0	48.9
90-180	1193.0	51.1
0-180	2333.0	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	15.5	0.7
10-20	49.9	2.1
20-30	87.2	3.7
30-40	123.4	5.3
40-50	153.7	6.6
50-60	174.9	7.5
60-70	184.6	7.9
70-80	181.9	7.8
80-90	168.9	7.2
90-100	169.5	7.3
100-110	185.7	8.0
110-120	191.3	8.2
120-130	183.8	7.9
130-140	163.4	7.0
140-150	132.5	5.7
150-160	94.8	4.1
160-170	54.9	2.4
170-180	17.2	0.7

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**PICTURES**



**CONCLUSION**

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:

Timothy Quigley  
Engineer  
Lighting Division

Report Reviewed By:

Hector Huitron  
Associate Engineer  
Lighting Division

Attachments: IES File

**REVISION HISTORY**

JOB NUMBER	DATE OF REVISION	PROJECT HANDLER	REVIEWED BY	REVISION NOTE
None				