

# VISUAL COMFORT GROUP TEST REPORT

## SCOPE OF WORK

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

## MODEL NUMBER

700TDAKV13\*\*\*-LED927

## REPORT NUMBER

104206403CHI-047

## ISSUE DATE

March 6, 2020

## REVISION DATE

None

## DOCUMENT CONTROL NUMBER

TBD

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**REPORT DATE: March 6, 2020**

**TEST REPORT**

**TEST OF ONE AKOVA GRANDE PENDANT**

MODEL NO. 700TDAKV13\*\*\*-LED927  
LED MODEL NO. MAXLITE 300BHV525  
DRIVER MODEL NO. NA

**RENDERED TO:**

VISUAL COMFORT GROUP  
7400 LINDER AVE.  
SKOKIE IL 60077

**STATEMENT OF LIMITATIONS**

NVLAP Lab Code 600186-0. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

**AUTHORIZATION**

The testing performed was authorized by signed quote number Qu-01040682-1.

**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 700TDAKV13\*\*\*-LED927. The sample was received by Intertek on February 26, 2020 in undamaged condition and one sample was tested as received. The sample designation was AH02262020084625.

**DATE OF TESTS**

February 27, 2020.

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**TEST REPORT**

**SUMMARY**

<b>MODEL NO:</b>	700TDAKV13***-LED927
<b>DESCRIPTION:</b>	Akova Grande Pendant

CRITERIA	RESULTS
Lumen Output (lumens)	907.9
Input Power (W) @ 120 (VAC)	13.55
Lumen Efficacy (lm/W)	67.0
Input Power Factor ( ) @ 120 (VAC)	0.954

**EQUIPMENT LIST**

EQUIPMENT USED	MODEL NO.	CONTROL NO.	LAST CAL DATE	CAL DUE DATE
Yokogawa Power Meter	WT210	146919	7/1/2019	7/1/2020
Omega Thermometer	DPI8-C24	146920	10/3/2019	10/3/2020
LSI High Speed Mirror Goniometer	6440T	146928	VBV	VBV
Newport Thermohygrometer	iServer	146957	12/2/2019	12/2/2020
Pacific, AC Power Supply	118-ACX	CHI0153	VBV	VBV

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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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**TEST REPORT**

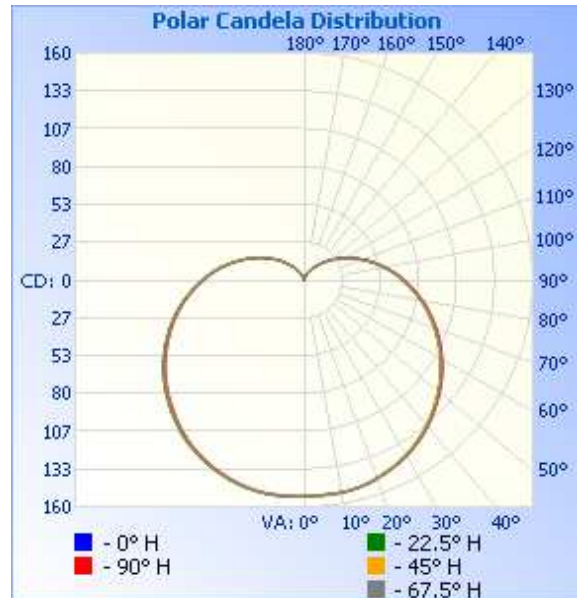
**RESULTS OF TESTS**

**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)
AH02262020084625	Base Up	120.0	118.4	13.55	0.954	907.9	67.0

**INTENSITY SUMMARY - CANDELAS**

Angle	0	22.5	45	67.5	90
0	152	152	152	152	152
5	152	152	152	152	152
10	152	152	152	152	152
15	151	151	151	151	151
20	149	148	149	149	149
25	146	146	146	146	147
30	143	142	142	143	143
35	139	138	138	139	140
40	134	133	133	134	135
45	129	128	128	129	129
50	123	122	122	124	124
55	117	116	116	118	118
60	111	110	110	111	112
65	104	103	104	104	105
70	97	97	97	98	99
75	90	90	90	91	92
80	83	83	83	84	85
85	76	76	76	77	77
90	70	69	69	70	70
95	63	62	62	63	64
100	56	55	55	56	56
105	49	48	49	49	50
110	43	42	42	43	43
115	37	36	36	36	37
120	32	31	31	31	31
125	26	25	25	26	26
130	21	20	21	21	21
135	17	16	16	16	17
140	13	12	13	13	13
145	10	9	9	9	10
150	7	7	7	7	7
155	5	4	4	4	4
160	3	3	3	3	3
165	2	2	2	2	2
170	1	1	1	1	1
175	1	1	1	1	1



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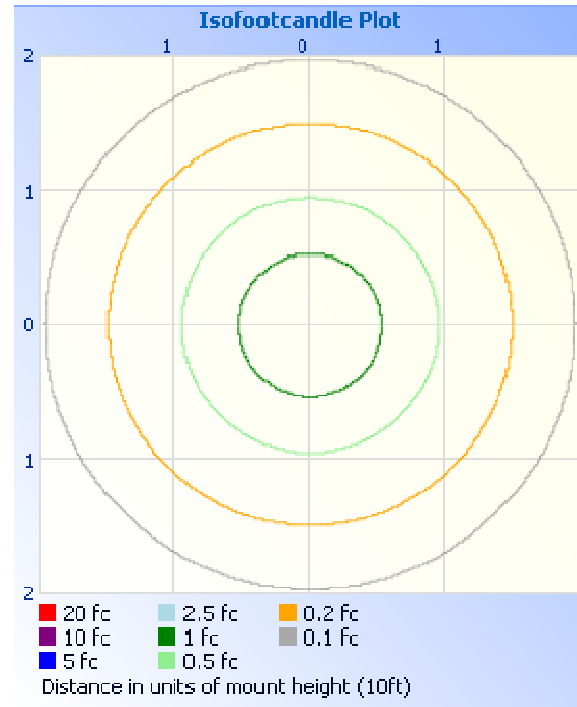
**TEST REPORT**

**RESULTS OF TESTS**

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

MOUNTING HEIGHT: 10ft	
ILLUMINANCE - CONE OF LIGHT	ISOILLUMINATION PLOT

Illuminance at a Distance			
	Center Beam fc	Beam Width	
1.7R	52.8 fc	42.5 ft	43.6 ft
3.3R	14.0 fc	82.6 ft	84.7 ft
5.0R	6.10 fc	125.1 ft	128.3 ft
6.7R	3.40 fc	167.7 ft	171.9 ft
8.3R	2.21 fc	207.7 ft	213.0 ft
10.0R	1.53 fc	250.2 ft	256.6 ft
■ Vert. Spread: 170.9°			
■ Horiz. Spread: 171.1°			



**ZONAL LUMEN SUMMARY AND PERCENTAGES**

ZONE	LUMENS	% LUMINAIRE
0-30	125.2	13.8
0-40	212.6	23.4
0-60	418.6	46.1
60-90	285.3	31.4
70-100	250.2	27.6
90-120	158.6	17.5
0-90	704.0	77.5
90-180	203.9	22.5
0-180	907.9	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	14.6	1.6
10-20	42.8	4.7
20-30	67.8	7.5
30-40	87.5	9.6
40-50	100.2	11.0
50-60	105.8	11.7
60-70	104.3	11.5
70-80	96.8	10.7
80-90	84.2	9.3
90-100	69.1	7.6
100-110	52.6	5.8
110-120	36.9	4.1
120-130	23.4	2.6
130-140	13.0	1.4
140-150	6.1	0.7
150-160	2.2	0.2
160-170	0.5	0.1
170-180	0.1	0.0

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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:

Ian Smith  
Engineer  
Lighting Division

Report Reviewed By:

Jeff Davis  
N.A. Technical Lead  
Lighting Division

Attachments: IES File

**REVISION HISTORY**

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