

VISUAL COMFORT GROUP TEST REPORT

SCOPE OF WORK

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

MODEL NUMBER
700FIA24x-LED930

REPORT NUMBER
103643585CHI-031

ISSUE DATE
February 11, 2019

REVISION DATE
None

DOCUMENT CONTROL NUMBER
TBD
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REPORT DATE: February 11, 2019

TEST REPORT

TEST OF ONE CHANDELIER LUMINAIRE

MODEL NO. 700FIA24X-LED930
LED MODEL NO. SEOUL STW9A12D
DRIVER MODEL NO. LTF DA50W1400C2036-3001

RENDERED TO:

VISUAL COMFORT GROUP
7400 LINDER AVE.
SKOKIE, IL 60077

AUTHORIZATION

The testing performed was authorized by signed quote number Qu-00912313-2.

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 700FIA24x-LED930. The sample was received by Intertek on January 24, 2019 in undamaged condition and one sample was tested as received. The sample designation was AH01242019034321-031.

DATE OF TESTS

February 6, 2019.

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SUMMARY

MODEL NO:	700FIA24x-LED930
DESCRIPTION:	Chandelier Luminaire

CRITERIA	RESULTS
Lumen Output (lumens)	3685.3
Input Power (W) @ 120 (VAC)	50.70
Lumen Efficacy (lm/W)	72.7
Input Power Factor @ 120 (VAC)	0.997

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	VBV	VBV
Newport Thermohygrometer	iServer	146379	4/16/2018	4/16/2019
Pacific, AC power supply	118-ACX	CHI0358	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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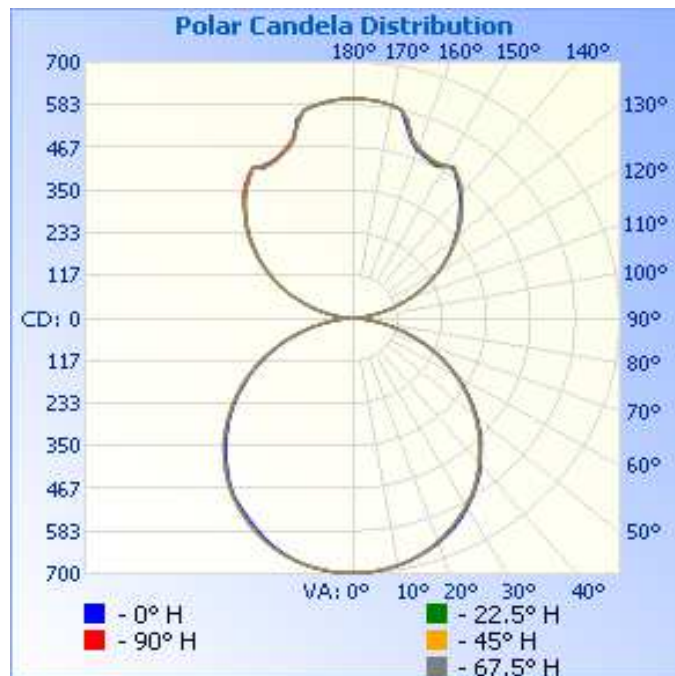
RESULTS OF TESTS

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)
AH01242019034321-031	Base Up	120.1	423.4	50.70	0.997	3685.3	72.7

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	698	698	698	698	698
5	695	695	695	695	695
10	688	686	686	687	687
15	674	672	672	672	673
20	656	650	652	652	653
25	632	624	625	626	626
30	601	593	596	595	597
35	564	558	561	561	563
40	522	516	518	518	520
45	478	470	472	473	474
50	425	419	421	422	423
55	373	366	367	368	370
60	315	309	310	312	313
65	258	250	251	253	255
70	198	189	191	193	195
75	138	129	130	132	134
80	81	73	74	75	77
85	33	28	29	30	31
90	6	6	6	6	7
95	21	24	24	23	24
100	59	62	62	62	61
105	106	111	110	109	110
110	158	161	161	160	160
115	210	214	213	212	212
120	261	264	263	263	263
125	308	313	312	312	311
130	354	361	358	360	358
135	395	405	402	402	400
140	437	442	447	444	445
145	473	476	478	479	476
150	483	478	482	482	481
155	476	475	482	484	481
160	490	497	498	500	501
165	545	561	560	557	556
170	592	592	592	592	591
175	599	599	599	599	600
180	601	601	601	601	601



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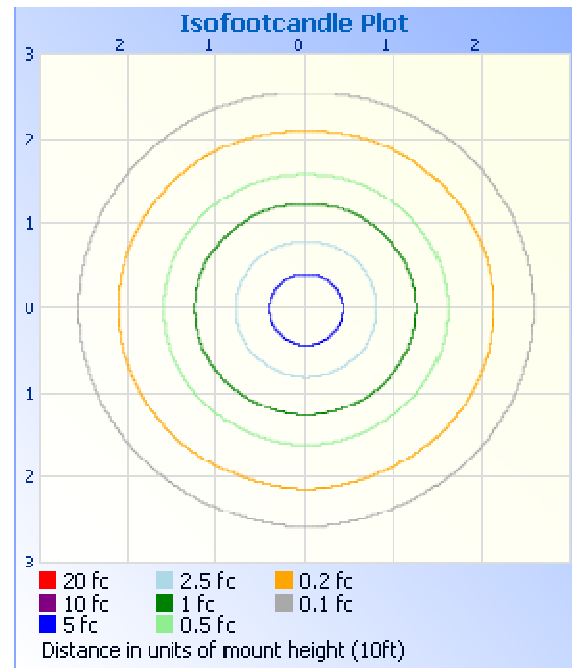
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RESULTS OF TESTS

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

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



ZONAL LUMEN SUMMARY AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	544.9	14.8
0-40	895.7	24.3
0-60	1590.6	43.2
60-90	429.3	11.6
70-100	207.3	5.6
90-120	351.7	9.5
0-90	2019.9	54.8
90-180	1665.4	45.2
0-180	3685.3	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	66.1	1.8
10-20	189.9	5.2
20-30	288.8	7.8
30-40	350.8	9.5
40-50	364.9	9.9
50-60	330.1	9.0
60-70	251.1	6.8
70-80	140.9	3.8
80-90	37.3	1.0
90-100	29.1	0.8
100-110	114.3	3.1
110-120	208.3	5.7
120-130	277.0	7.5
130-140	308.2	8.4
140-150	294.9	8.0
150-160	222.7	6.0
160-170	154.0	4.2
170-180	56.9	1.5

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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:

Tess Gallagher

Tess Gallagher
Engineer
Lighting Division

Report Reviewed By:

Tim Quigley

Timothy Quigley
Engineer
Lighting Division

Attachments: IES File

REVISION HISTORY

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