

VISUAL COMFORT GROUP TEST REPORT

SCOPE OF WORK

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

MODEL NUMBER
700ARL55x-LED930

REPORT NUMBER
103643585CHI-041

ISSUE DATE
February 18, 2019

REVISION DATE
None

DOCUMENT CONTROL NUMBER
TBD
© 2017 INTERTEK



REPORT NO.: 103643585CHI-041

REPORT DATE: February 18, 2019

TEST REPORT

TEST OF ONE CHANDELIER

MODEL NO. 700ARL55X-LED930
LED MODEL NO. SEOUL STW9C2SB.3030
DRIVER MODEL NO. LTF DA30W700C2542-3001

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 700ARL55x-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 AH01242019034321-041.

DATE OF TESTS

February 18, 2019.

REPORT NO.: 103643585CHI-041

REPORT DATE: February 18, 2019

TEST REPORT

SUMMARY

MODEL NO:	700ARL55x-LED930
DESCRIPTION:	Chandelier

CRITERIA	RESULTS
Lumen Output (lumens)	2998.8
Input Power (W) @ 120 (VAC)	47.19
Lumen Efficacy (lm/W)	63.6
Input Power Factor () @ 120 (VAC)	0.985

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

REPORT NO.: 103643585CHI-041
REPORT DATE: February 18, 2019

TEST REPORT

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.

REPORT NO.: 103643585CHI-041

REPORT DATE: February 18, 2019

TEST REPORT

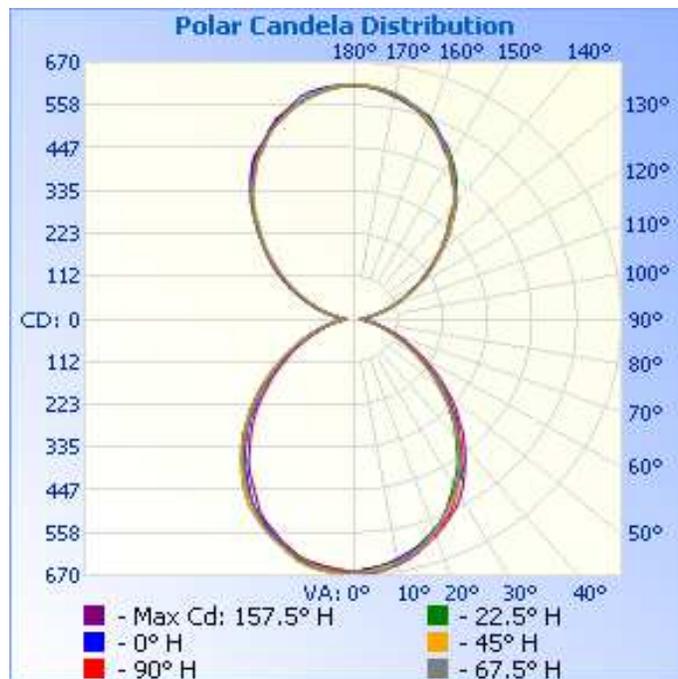
RESULTS OF TESTS

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)
AH01242019034321-041	Base Up	120.0	399.5	47.19	0.985	2998.8	63.6

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	662	662	662	662	662
5	651	654	656	662	652
10	636	643	644	647	642
15	615	618	624	622	620
20	589	586	593	590	595
25	550	553	553	551	565
30	511	501	515	511	518
35	474	456	467	462	472
40	406	399	406	408	415
45	356	345	350	354	363
50	293	283	292	295	303
55	237	228	232	237	241
60	179	177	177	184	188
65	135	132	133	132	138
70	100	94	93	93	98
75	68	65	62	63	65
80	45	40	39	39	40
85	27	25	23	23	24
90	24	21	20	19	17
95	30	30	29	26	24
100	49	51	48	45	44
105	78	82	77	74	71
110	112	115	111	107	106
115	150	156	153	148	145
120	193	200	194	192	190
125	243	246	243	241	238
130	295	291	294	286	288
135	346	338	347	333	340
140	403	394	399	392	392
145	446	445	438	436	438
150	486	488	483	480	482
155	521	516	516	515	520
160	561	558	554	547	550
165	579	573	576	575	577
170	599	594	597	596	595
175	608	607	609	606	608
180	611	611	611	611	611



REPORT NO.: 103643585CHI-041
REPORT DATE: February 18, 2019

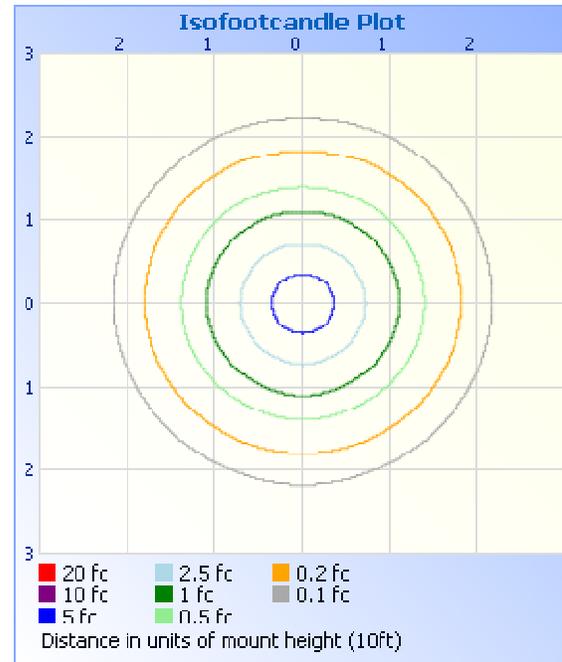
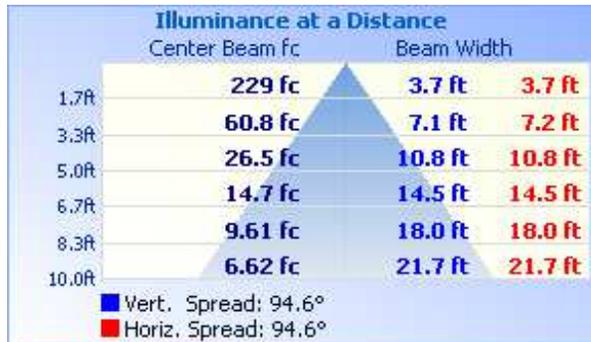
TEST REPORT

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

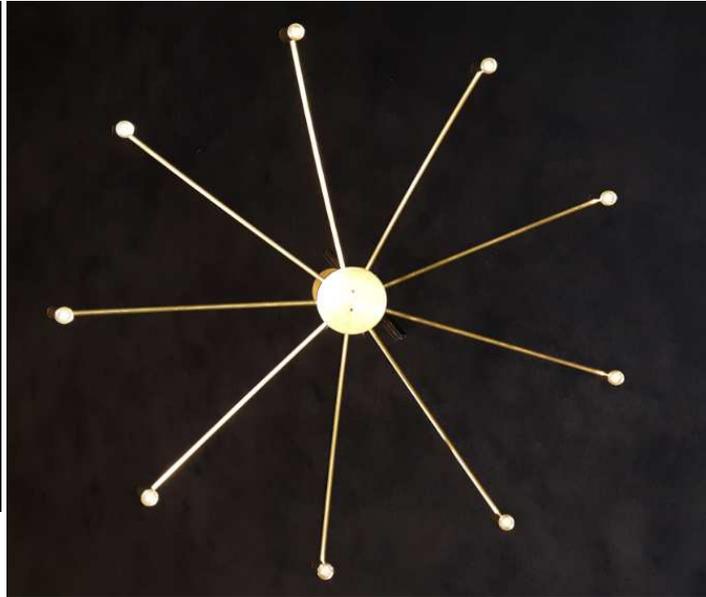
ZONE	LUMENS	% LUMINAIRE
0-30	495.9	16.5
0-40	789.6	26.3
0-60	1284.3	42.8
60-90	245.5	8.2
70-100	137.6	4.6
90-120	262.0	8.7
0-90	1529.8	51.0
90-180	1469.0	49.0
0-180	2998.8	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	62.4	2.1
10-20	175.7	5.9
20-30	257.8	8.6
30-40	293.7	9.8
40-50	277.2	9.2
50-60	217.5	7.3
60-70	140.9	4.7
70-80	73.8	2.5
80-90	30.8	1.0
90-100	33.0	1.1
100-110	81.2	2.7
110-120	147.8	4.9
120-130	214.4	7.1
130-140	260.9	8.7
140-150	273.9	9.1
150-160	238.3	7.9
160-170	162.0	5.4
170-180	57.5	1.9

REPORT NO.: 103643585CHI-041
REPORT DATE: February 18, 2019

TEST REPORT

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				