

VISUAL COMFORT GROUP TEST REPORT

SCOPE OF WORK

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

MODEL NUMBER

700BCTRS3x-LED930

REPORT NUMBER

103643585CHI-023

ISSUE DATE

January 22, 2019

REVISION DATE

None

DOCUMENT CONTROL NUMBER

TBD

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REPORT DATE: January 22, 2019

TEST REPORT

TEST OF ONE BATH/VANITY LUMINAIRE

MODEL NO. 700BCTRS3X-LED930
LED MODEL NO. SEOUL STW9A12D-E1
DRIVER MODEL NO. LTF DA18W450C2742-3001

RENDERED TO:

VISUAL COMFORT GROUP
7400 LINDER AVE.
SKOKIE, IL 60077

AUTHORIZATION

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

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 700BCTRS3x-LED930. The sample was received by Intertek on January 8, 2019 in undamaged condition and one sample was tested as received. The sample designation was AH01082019040430-004.

DATE OF TESTS

January 15, 2019.

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SUMMARY

MODEL NO:	700BCTRS3x-LED930
DESCRIPTION:	Bath/Vanity Luminaire

CRITERIA	RESULTS
Lumen Output (lumens)	671.0
Input Power (W) @ 120 (VAC)	18.04
Lumen Efficacy (lm/W)	37.2
Input Power Factor @ 120 (VAC)	0.973

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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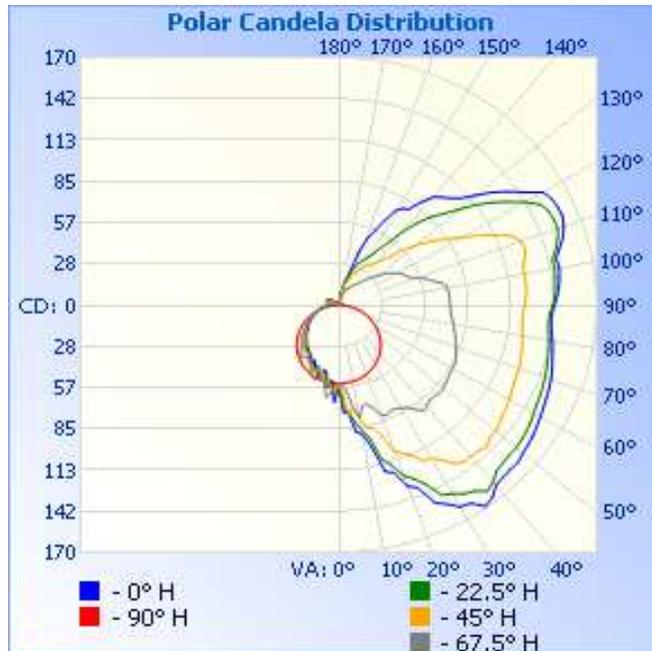
RESULTS OF TESTS

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)
AH01082019040430-004	Base Up	120.0	154.5	18.04	0.973	671.0	37.2

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	54	54	54	54	54
5	75	74	76	60	53
10	90	87	79	78	53
15	118	110	87	70	52
20	132	125	106	80	51
25	150	136	114	80	50
30	160	150	121	82	48
35	169	156	133	88	45
40	161	158	135	91	42
45	160	153	138	89	39
50	158	153	135	90	36
55	156	151	132	88	32
60	153	148	130	87	28
65	151	146	128	85	23
70	149	145	126	82	19
75	146	143	125	80	14
80	143	141	123	77	10
85	140	139	121	74	6
90	142	141	123	73	3
95	146	143	124	73	2
100	148	144	124	72	2
105	150	148	127	64	2
110	158	154	128	54	2
115	159	153	114	48	2
120	155	142	92	44	2
125	136	123	77	38	2
130	117	102	62	30	1
135	104	85	46	24	1
140	97	66	38	19	1
145	80	48	33	17	1
150	75	38	29	14	1
155	57	32	24	12	1
160	39	24	18	9	0
165	17	16	15	2	0
170	8	7	6	0	0



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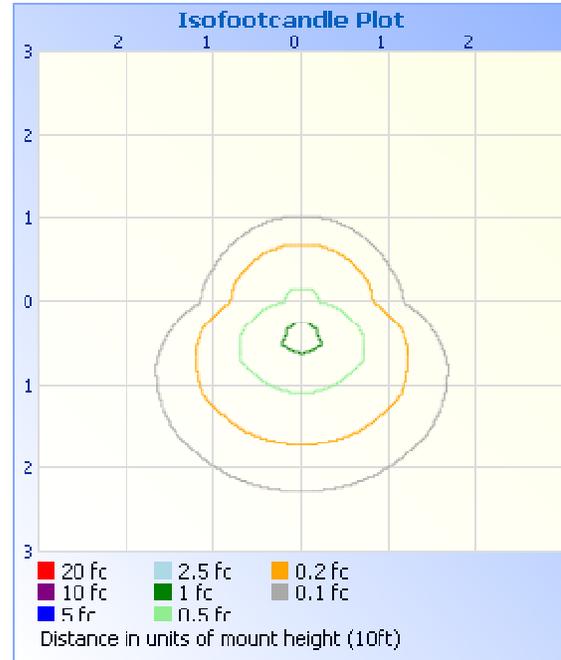
TEST REPORT

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	61.1	9.1
0-40	111.0	16.5
0-60	234.1	34.9
60-90	190.3	28.4
70-100	184.9	27.6
90-120	170.2	25.4
0-90	424.4	63.2
90-180	246.6	36.8
0-180	671.0	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	6.1	0.9
10-20	19.7	2.9
20-30	35.3	5.3
30-40	50.0	7.4
40-50	59.1	8.8
50-60	64.0	9.5
60-70	65.5	9.8
70-80	64.0	9.5
80-90	60.7	9.0
90-100	60.2	9.0
100-110	58.6	8.7
110-120	51.4	7.7
120-130	36.0	5.4
130-140	21.3	3.2
140-150	11.6	1.7
150-160	5.8	0.9
160-170	1.7	0.2
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:

Tess Gallagher

Tess Gallagher
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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				