

VISUAL COMFORT GROUP TEST REPORT

SCOPE OF WORK

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

MODEL NUMBER
700NYR30**-LED930

REPORT NUMBER
104206403CHI-046

ISSUE DATE
March 13, 2020

REVISION DATE
August 5, 2020

DOCUMENT CONTROL NUMBER
TBD
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REPORT NO.: 104206403CHI-046

REPORT DATE: August 5, 2020

TEST REPORT

TEST OF ONE NYRA 30 CHANDELIER

MODEL NO. 700NYR30**-LED930
LED MODEL NO. SAMSUNG SPMWH1228FD5WWS2
DRIVER MODEL NO. MACRON GBLD001

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 700NYR30**-LED930. 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

March 10, 2020.

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SUMMARY

MODEL NO:	700NYR30**-LED930
DESCRIPTION:	Nyra 30 Chandelier

CRITERIA	RESULTS
Lumen Output (lumens)	4632.0
Input Power (W) @ 120 (VAC)	61.83
Lumen Efficacy (lm/W)	74.9
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	7/1/2019	7/1/2020
Omega Thermometer	DPI8-C24	146920	10/3/2019	10/3/2020
LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU
Newport Thermohygrometer	iServer	146957	12/2/2019	12/2/2020
Pacific, AC Power Supply	118-ACX	CHI0153	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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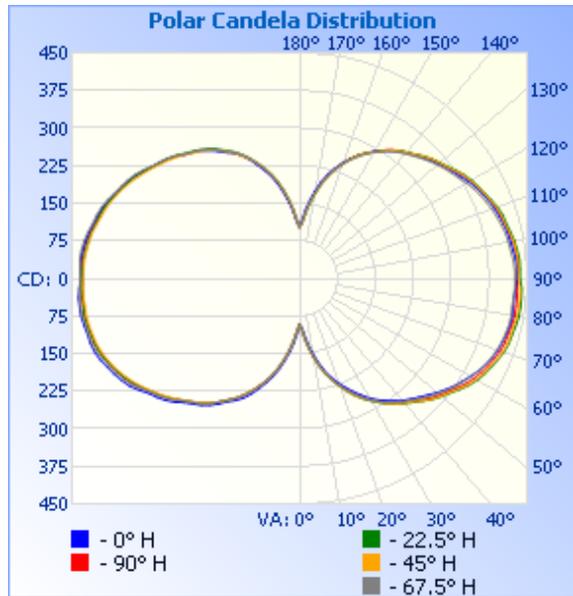
RESULTS OF TESTS

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)
AH02262020084625	Base Up	120.0	522.2	61.83	0.987	4632.0	74.9

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	91	91	91	91	91
5	115	121	122	122	121
10	153	159	160	160	159
15	190	196	196	196	195
20	221	228	228	226	226
25	248	257	258	254	255
30	276	282	280	280	279
35	297	306	305	301	303
40	318	325	324	320	322
45	335	346	345	338	341
50	354	366	365	357	362
55	374	386	384	375	380
60	390	406	404	392	398
65	406	419	416	406	412
70	417	430	428	416	422
75	424	435	433	422	427
80	427	440	437	425	432
85	426	441	438	425	432
90	429	436	433	426	430
95	430	437	434	424	433
100	424	432	430	419	429
105	419	424	421	413	420
110	410	417	414	405	414
115	400	404	402	394	401
120	386	392	391	381	390
125	371	377	375	367	375
130	357	361	360	354	359
135	342	346	345	340	345
140	327	329	328	325	328
145	312	313	313	310	314
150	293	291	291	291	292
155	270	270	270	267	271
160	244	241	241	241	243
165	215	209	209	210	212
170	178	170	171	172	174
175	138	130	130	131	133
180	102	102	102	102	102



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RESULTS OF TESTS

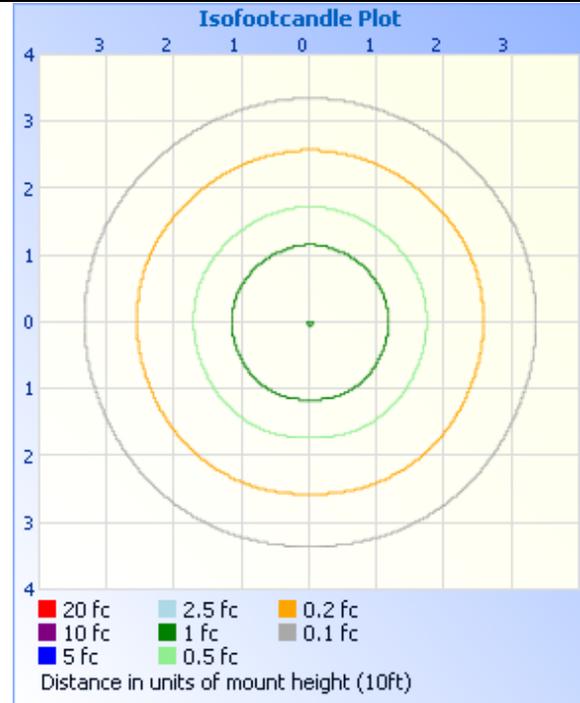
PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

MOUNTING HEIGHT: 10ft

ILLUMINANCE - CONE OF LIGHT	ISOILLUMINATION PLOT
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Illuminance at a Distance		
	Center Beam fc	Beam Width
1.7ft	31.6 fc	0.2 ft
3.3ft	8.37 fc	0.3 ft
5.0ft	3.65 fc	0.5 ft
6.7ft	2.03 fc	0.6 ft
8.3ft	1.32 fc	0.8 ft
10.0ft	0.91 fc	1.0 ft

■ Beam Spread: 5.5°



ZONAL LUMEN SUMMARY AND PERCENTAGES

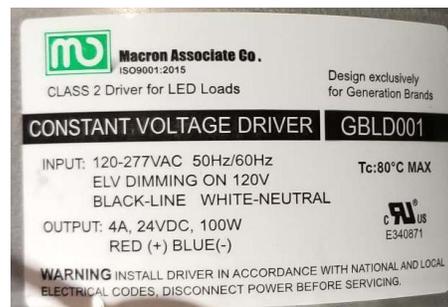
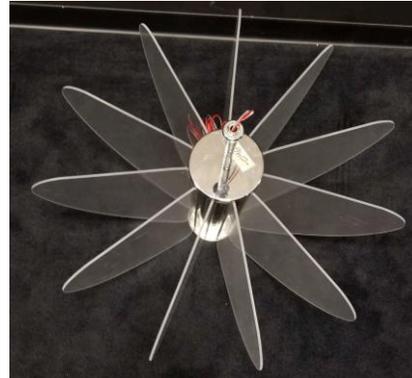
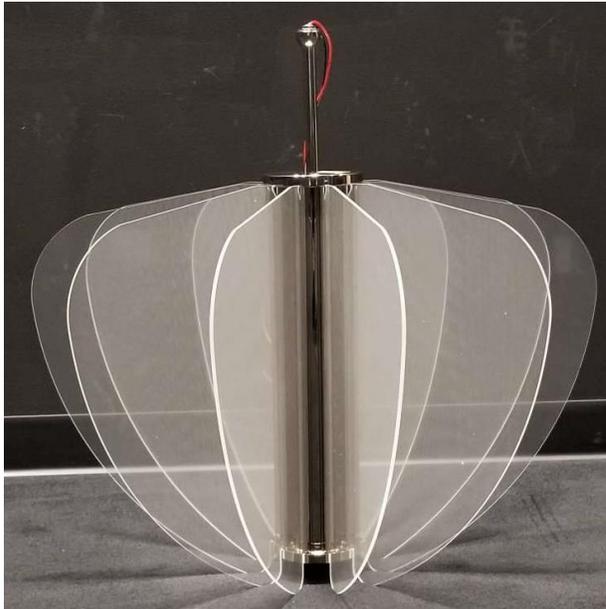
ZONE	LUMENS	% LUMINAIRE
0-30	187.9	4.1
0-40	378.7	8.2
0-60	986.1	21.3
60-90	1335.2	28.8
70-100	1395.6	30.1
90-120	1311.7	28.3
0-90	2321.4	50.1
90-180	2310.7	49.9
0-180	4632.0	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	12.9	0.3
10-20	56.3	1.2
20-30	118.8	2.6
30-40	190.7	4.1
40-50	265.5	5.7
50-60	341.9	7.4
60-70	409.3	8.8
70-80	453.8	9.8
80-90	472.1	10.2
90-100	469.7	10.1
100-110	444.1	9.6
110-120	397.8	8.6
120-130	335.6	7.2
130-140	266.7	5.8
140-150	196.4	4.2
150-160	125.5	2.7
160-170	60.8	1.3
170-180	14.1	0.3

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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:

Report Reviewed By:

Signature on file

Signature on file

Ian Smith
Engineer
Lighting Division

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	8/5/2020	IS <i>IS</i>	JD <i>JD</i>	Corrected Product, LED, & Driver Model Numbers