

VISUAL COMFORT GROUP TEST REPORT

SCOPE OF WORK

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

MODEL NUMBER

700VLV24**-LED922

REPORT NUMBER

104206403CHI-007

ISSUE DATE

January 24, 2020

REVISION DATE

None

DOCUMENT CONTROL NUMBER

TBD

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REPORT DATE: January 24, 2020

TEST REPORT

TEST OF ONE VELLAVI 24 CHANDELIER

MODEL NO. 700VLV24**-LED922
LED MODEL NO. DILUX WW-FLS102T23WW120B-24(BLK)-5000-UR-3S
DRIVER MODEL NO. MACRON MDR-608-24-60-LD

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 700VLV24**-LED922. The sample was received by Intertek on January 10, 2020 in undamaged condition and one sample was tested as received. The sample designation was AH01102020125804-007.

DATE OF TESTS

January 20, 2020.

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SUMMARY

MODEL NO:	700VLV24**-LED922
DESCRIPTION:	Vellavi 24 Chandelier

CRITERIA	RESULTS
Lumen Output (lumens)	1616.8
Input Power (W) @ 120 (VAC)	27.30
Lumen Efficacy (lm/W)	59.2
Input Power Factor () @ 120 (VAC)	0.986

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
Elgar, AC Power Supply	CW1251	146111	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

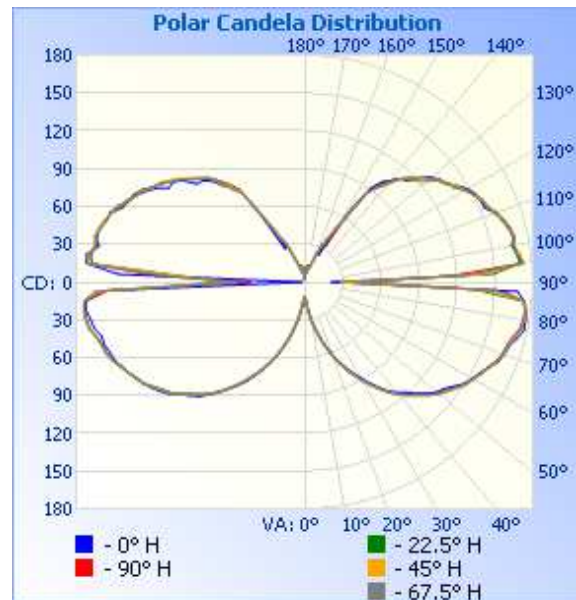
RESULTS OF TESTS

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)
AH01102020125804-007	Base Up	120.1	230.6	27.30	0.986	1616.8	59.2

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	12	12	12	12	12
5	17	19	18	18	18
10	30	32	31	31	31
15	44	46	46	46	45
20	59	61	61	61	60
25	74	76	76	76	75
30	87	90	90	89	89
35	102	104	104	103	103
40	114	117	117	116	116
45	125	127	127	127	126
50	136	138	138	138	137
55	144	146	147	146	145
60	153	154	154	154	153
65	160	161	161	160	160
70	168	167	167	167	166
75	173	171	171	170	170
80	177	176	176	175	175
85	174	173	173	174	174
90	21	33	29	40	42
95	173	171	173	174	172
100	166	167	168	168	168
105	167	166	166	166	167
110	161	161	162	159	161
115	154	155	155	154	153
120	148	147	146	146	146
125	137	137	137	137	136
130	130	127	126	125	127
135	114	118	117	116	117
140	105	104	100	103	105
145	91	86	87	87	90
150	50	50	48	49	34
155	33	29	33	31	31
160	15	15	15	15	16
165	10	10	10	11	11
170	14	13	13	12	12
175	8	7	7	8	8
180	2	2	2	2	2



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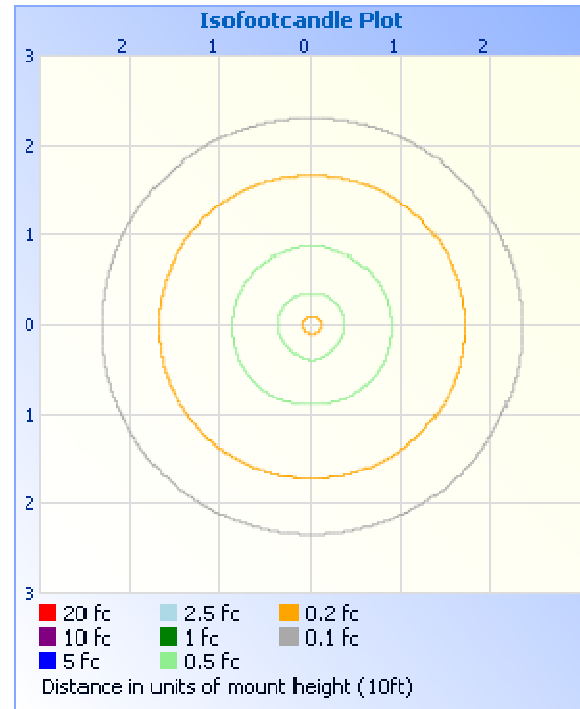
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TEST REPORT

RESULTS OF TESTS

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

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



ZONAL LUMEN SUMMARY AND PERCENTAGES

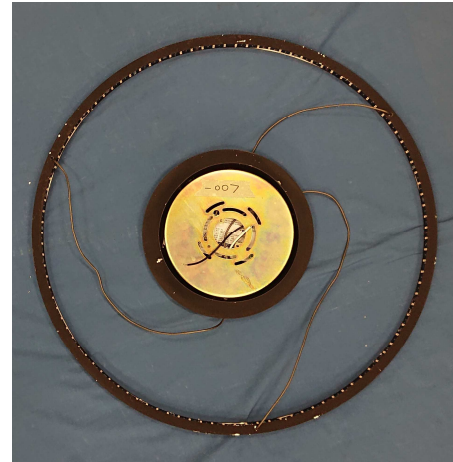
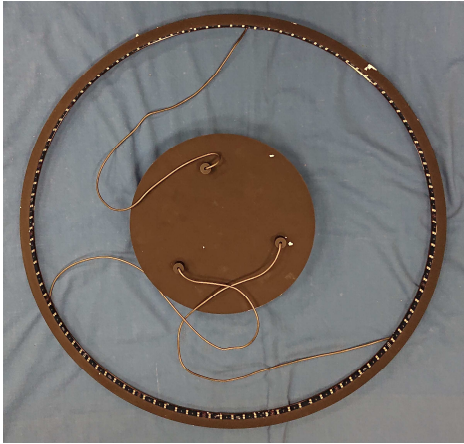
ZONE	LUMENS	% LUMINAIRE
0-30	50.5	3.1
0-40	115.4	7.1
0-60	344.5	21.3
60-90	506.4	31.3
70-100	501.9	31.0
90-120	482.9	29.9
0-90	851.0	52.6
90-180	765.8	47.4
0-180	1616.8	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	2.1	0.1
10-20	13.3	0.8
20-30	35.1	2.2
30-40	65.0	4.0
40-50	98.2	6.1
50-60	130.9	8.1
60-70	159.0	9.8
70-80	180.5	11.2
80-90	167.0	10.3
90-100	154.5	9.6
100-110	175.7	10.9
110-120	152.6	9.4
120-130	122.9	7.6
130-140	90.0	5.6
140-150	51.3	3.2
150-160	14.6	0.9
160-170	3.2	0.2
170-180	0.9	0.1

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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

Ian Smith
Engineer
Lighting Division

Report Reviewed By:

Jeffrey Davis

Jeff Davis
NA Technical Lead
Lighting Division

Attachments: IES File

REVISION HISTORY

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