

# 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 NO.: 104206403CHI-007**

**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.

**REPORT NO.: 104206403CHI-007**

**REPORT DATE: January 24, 2020**

**TEST REPORT**

**SUMMARY**

<b>MODEL NO:</b>	700VLV24**-LED922
<b>DESCRIPTION:</b>	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	VBU	VBU
Newport Thermohygrometer	iServer	146957	12/2/2019	12/2/2020
Elgar, AC Power Supply	CW1251	146111	VBU	VBU

**REPORT NO.: 104206403CHI-007**

**REPORT DATE: January 24, 2020**

**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.: 104206403CHI-007

REPORT DATE: January 24, 2020

TEST REPORT

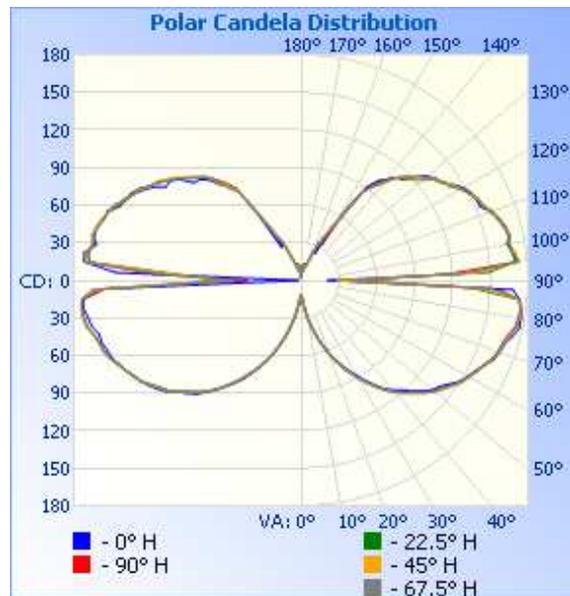
RESULTS OF TESTS

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



**REPORT NO.: 104206403CHI-007**  
**REPORT DATE: January 24, 2020**

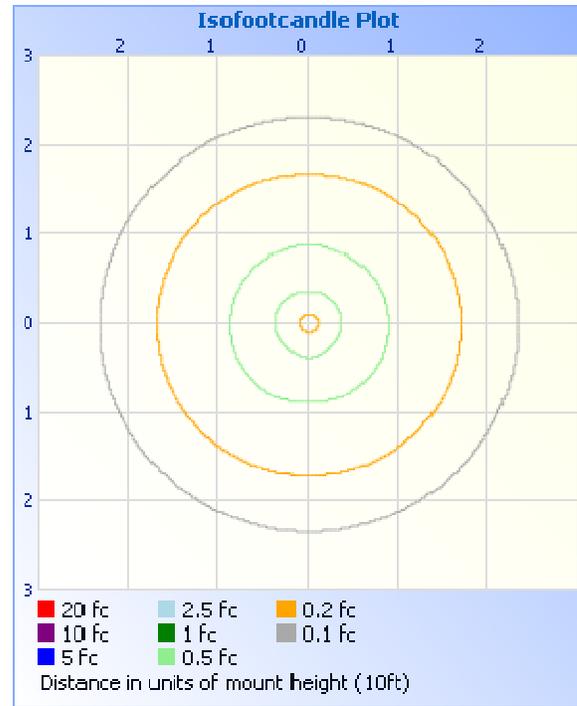
**TEST REPORT**

**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**

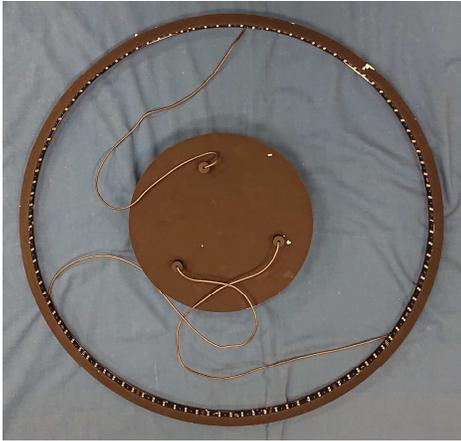
ZONE	LUMENS	% LUMINAIRE
0-30	50.5	3.1
0-40	115.4	7.1
0-60	344.5	21.3
60-90	506.4	31.3
70-100	501.9	31.0
90-120	482.9	29.9
0-90	851.0	52.6
90-180	765.8	47.4
0-180	1616.8	100.0

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

**REPORT NO.: 104206403CHI-007**  
**REPORT DATE: January 24, 2020**

**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:

Ian Smith  
Engineer  
Lighting Division

Report Reviewed By:

Jeff Davis  
NA Technical Lead  
Lighting Division

Attachments: IES File

**REVISION HISTORY**

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