

VISUAL COMFORT AND COMPANY TEST REPORT

SCOPE OF WORK

LED Performance Testing

MODEL NUMBER

700ESF44**-LED927

PROJECT NUMBER

G105265097

REPORT NUMBER

105265097CHI-001D

ISSUE DATE

12/29/2022

REVISED DATE

None

TEST DATES

12/21/2022.

DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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REPORT NUMBER
105265097CHI-001D

MODEL NUMBER(s)
700ESF44**-LED927

REPORT RENDERED TO:
VISUAL COMFORT AND COMPANY
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SKOKIE, IL 60077
USA

STATEMENT OF LIMITATION

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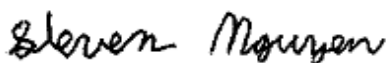
AUTHORIZATION

The testing performed was authorized by signed quote number Qu-01297671-0.

TEST STANDARDS

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

In Charge of Testing:



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Reviewer:



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SAMPLE INFORMATION

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ITEMS RECEIVED

Item No.	Control No.	Model No.	Description	Type	Received
1	AH11232022041052-001	700ESF44**-LED927	Esfera Large Chandelier	Production	11/23/2022

TESTED SAMPLE CONFIGURATIONS

Config No.	Tested Model No.	Item Nos. Utilized
1	700ESF44**-LED927	1

SAMPLE PHOTOS - TESTED CONFIGURATIONS



SUMMARY

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PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	700ESF44**-LED927
Product Description:	Esfera Large Chandelier
LED Model No.:	BXRE-27G1000-C-82 (927, 2-step)
Driver Model No.:	DA32W900C2036-3001
Light Source:	LED

Criteria	Results
Light Output (lumens)	5780.9
Input Power (W) @ 120VAC (Vac)	62.72
Lumen Efficacy (lm/W)	92.2
Input Power Factor () @ 120VAC (Vac)	0.997

TEST METHODS

SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS

No seasoning was performed in accordance with IESNA LM-79.

TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

A Type C Mirror Goniophotometer system was used to measure the luminous intensity (candela) at each angle of distribution for the EUT. Electrical measurements of the unit were measured using a power analyzer. Each EUT was operated at the rated input voltage of the system in its designated orientation. The ambient temperature was measured at a position near the EUT at equal height and stabilization procedures to LM-79 were followed.

TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

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Test Configuration	Tested Model No.	Pass/Fail/NA
1	700ESF44**-LED927	NA

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

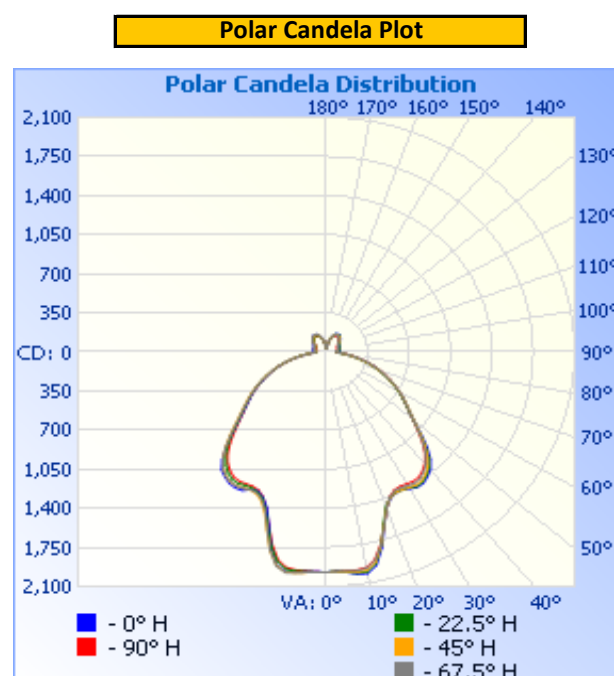
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()
Up	120.04	524.0	62.72	0.997

Light Output (lm)	Lumen Efficacy (lm/W)
5780.9	92.2

INTENSITY SUMMARY - CANDELA

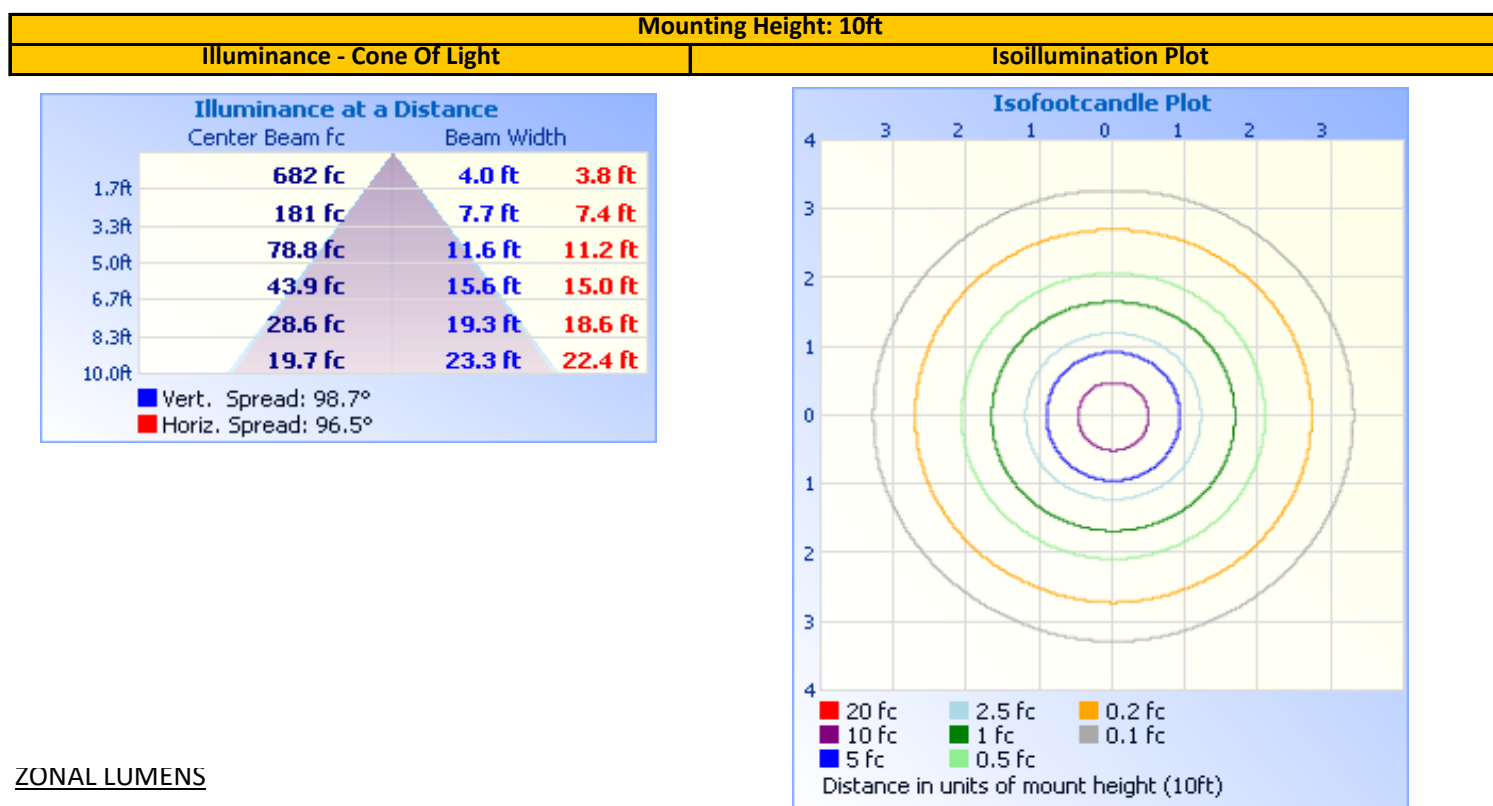
Angle	0	22.5	45	67.5	90
0	1971	1971	1971	1971	1971
5	1978	1977	1974	1967	1967
10	2012	1996	1985	1965	1959
15	1812	1792	1793	1787	1779
20	1488	1474	1489	1489	1489
25	1390	1386	1387	1368	1362
30	1411	1402	1400	1379	1363
35	1432	1419	1407	1381	1366
40	1370	1351	1337	1308	1298
45	1204	1183	1176	1158	1153
50	976	971	977	973	966
55	825	822	832	832	824
60	711	705	714	716	712
65	591	585	592	597	596
70	476	467	474	481	482
75	356	347	353	363	363
80	237	230	235	245	248
85	136	131	135	142	147
90	90	89	88	89	88
95	98	93	87	80	78
100	116	110	103	95	89
105	116	109	104	102	96
110	116	112	107	105	100
115	117	114	110	108	103
120	120	118	113	110	106
125	132	130	125	121	117
130	150	147	142	137	132
135	166	163	159	152	146
140	179	175	172	165	158
145	187	183	180	174	167
150	186	182	180	176	170
155	176	173	171	168	164
160	155	152	151	148	145
165	124	120	119	118	115
170	83	80	79	80	78
175	45	43	43	43	43
180	28	28	28	28	28

Entire luminous intensity matrix found in .IES file



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ILLUMINANCE SUMMARY



ZONAL LUMENS

Zonal Lumen Summary					
Zone	Lumens	Luminaire	Zone	Lumens	Total
0-30	1,334.2	23.1%	0-10	189.1	3.3%
0-40	2,206.3	38.2%	10-20	495.9	8.6%
0-60	3,862.1	66.8%	20-30	649.3	11.2%
60-90	1,136.6	19.7%	30-40	872.1	15.1%
70-100	644.2	11.1%	40-50	905.5	15.7%
90-120	320.3	5.5%	50-60	750.3	13.0%
0-90	4,998.7	86.5%	60-70	592.1	10.2%
90-180	782.2	13.5%	70-80	381.1	6.6%
0-180	5,780.9	100.0%	80-90	163.5	2.8%
			90-100	99.7	1.7%
			100-110	111.1	1.9%
			110-120	109.5	1.9%
			120-130	113.1	2.0%
			130-140	121.1	2.1%
			140-150	110.6	1.9%
			150-160	77.8	1.3%
			160-170	34.0	0.6%
			170-180	5.3	0.1%

EQUIPMENT LIST

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#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	Yokogawa Power Meter	WT310E	CHI0664	3/30/2022	3/30/2023
2	Omega Thermometer	DPI8-C24	146920	10/4/2022	10/4/2023
3	LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU
4	Newport Thermohygrometer	iServer	CHI0452	2/3/2022	2/3/2023
5	Chroma Power Supply	61604	CHI0371	VBU	VBU

Note: Standard sources listed above are traceable to NIST: National Institute of Standards and Technology

REVISION HISTORY

#	Revision Date	Updated By	Reviewed By	Description of Change
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