

REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Project No. G100235873 Date: November 11, 2010

REPORT NO. 100235873CRT-001

TEST OF ONE LED INDUCTION AREA LIGHT

FIXTURE MODEL NO. FL94022

RENDERED TO

ESCO LIGHTING INC 3254 NORTH KILBOURNE AVENUE CHICAGO, IL 60641

<u>TEST</u>: Electrical and Photometric tests as required to the IESNA test standard.

<u>LABORATORY NOTE</u>: The laboratory that conducted the testing detailed in this report has been Qualified,

Verified, and Recognized for LM-79 Testing for ENERGY STAR for SSL by US

DOE's CALIPER program.

<u>AUTHORIZATION</u>: The testing performed was authorized by signed quote number 500261824.

STANDARDS USED: The following American National Standards or Illuminating Engineering Society of

North America Test Guides were used in part or totally to test each specimen:

IESNA LM-79: 2008 Approved Method for Electrical and Photometric Measurements of Solid-State

Lighting Products

ANSI NEMA ANSLG C78.377: 2008 Specifications of the Chromaticity of Solid State Lighting

DESCRIPTION OF SAMPLE: The client submitted one sample of model number FL94022. The sample

was received by Intertek on October 10, 2010, in undamaged condition, and one sample was tested as received. The sample designation was E7491I.

DATES OF TESTS: November 10, 2010



SUMMARY

Model No.: FL94022

Description: LED INDUCTION AREA LIGHT

Criteria	Result
Total Lumen Output	6642 Lumens
Total Power	160.5 W
Power Factor	0.986
Luminaire Efficacy	41.38

EQUIPMENT LIST

			Last	
	Model	Control	Calibration	Calibration
Equipment Used	Number	Number	Date	Due Date
Elgar AC Power Supply	CW1251			
Xitron Power Analyzer	2503H	E235	04/09/10	04/09/11
Fluke Temperature Meter	52	T801	06/11/10	06/11/11
Kikusui DC Power Supply	35-10L	E160		
Sorenson DC Power Supply	DLM150-20E			
LSI High Speed Mirror Goniophotometer	6440		Before Use	Before Use

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 LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Each sample was operated at input rated voltage in its designated orientation. Each sample was allowed to stabilize for at least thirty minutes before measurements were made. Electrical measurements including voltage, current, and power were measured using the Xitron or Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

Estimated Total Operating Time

Model No.	Total Hours
FI 94022	2



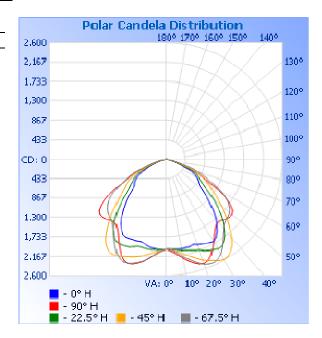
RESULTS OF TESTS

Photometric and Electrical Measurements - Distribution Method

Intertek	Base	Input Voltage	Input Current	Input Power	Input Power
Sample No.	Orientation	(Vac)	(mA)	(Watts)	Factor
			FL94022		
E7491I	UP	120.0	1357	160.5	0.986
			Absolute	Lumen	
			Luminous	Efficacy	
	Intertek	Base	Flux	(Lumens Per	
	Sample No.	Orientation	(Lumens)	Watt)	
			FL94022		
	E7491I	UP	6642	41.38	

Intensity (Candlepower) Summary at 25℃ - Candelas

Angle	0	22.5	45	67.5	90		
	FL94022						
0	2013	2013	2013	2013	2013		
5	2022	2029	2046	2062	2098		
10	2035	2069	2139	2206	2246		
15	2027	2104	2261	2357	2400		
20	2038	2156	2396	2496	2479		
25	2080	2251	2491	2539	2370		
30	2120	2315	2583	2437	2118		
35	1970	2249	2520	2215	1893		
40	1720	2028	2292	2002	1824		
45	1389	1715	1947	1907	1896		
50	1064	1362	1604	1852	1927		
55	891	1045	1287	1703	1762		
60	762	857	1093	1384	1288		
65	569	664	834	993	801		
70	337	405	490	633	421		
75	135	166	206	280	171		
80	22	30	50	58	44		
85	0	0	0	3	4		
90	0	0	0	0	0		

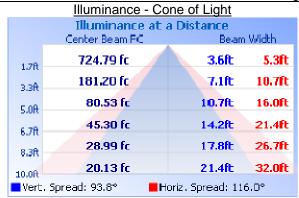


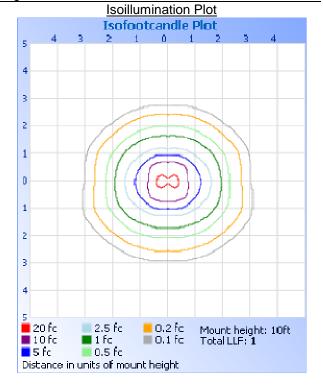


RESULTS OF TESTS (cont'd)

Illumination Plots

Model No.: FL94022 Mounting Height: 10 ft.





Date: November 11, 2010

Zonal Lumen Summary and Percentages at 25℃

Zone	Lumens	% Luminaire
	FL94022	
0-30	1905	28.7
0-40	3239	48.8
0-60	5701	85.8
60-90	940.6	14.2
0-90	6642	100.0
90-180	0.0	0.0
0-180	6642	100.0



Picture (not to scale)



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:

StPM

Report Reviewed By:

Steven Mosier Technician I Lighting Division

Attachment: None

Jacki Swiernik Project Engineer Lighting Division

Date: November 11, 2010