REPORT

545 E. Algonquin Rd Arlington Heights, IL 60005

Project No. G100822491 Date: July 30, 2012

REPORT NO. 100822491CHI-003

TEST OF ONE INDUCTION HOOK/PENDANT-MOUNT LUMINAIRE
FIXTURE MODEL NO. Fi4550A
GENERATOR MODEL NO. R045DS-A WJD100W-V28
LAMP MODEL NO. WJY100

RENDERED TO

ESCO LIGHTING, INC.
3254 NORTH KILBOURN AVENUE
CHICAGO, IL 60641-4505

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

AUTHORIZATION: The testing performed was authorized by signed quote number 500389866.

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-9: 2009 Approved Method for Electrical and Photometric Measurements of Fluorescent Lamps

IESNA LM-41: 1998 Approved Method for Photometric Testing of Indoor Fluorescent Luminaires

IESNA LM-54: 1999 Approved Guide to Lamp Seasoning

DESCRIPTION OF SAMPLE: The client submitted one sample of model Fi4550A. The sample was received by Intertek on June 26, 2012, in undamaged condition, and one sample was tested as received. The sample designation was CHI1206261333-001.

DATES OF TEST: July 26, 2012

SUMMARY

Model No.:	Fi4550A
Description:	Pendant/Hook-mount 12" diameter induction high bay luminaire with clear polymeric refractor.

Criteria	Result
Total Lumen Output	6772 Lumens
Total Power	113.3 W
Luminaire Efficacy	59.76
Power Factor	0.823

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Calibration Date	Calibration Due Date
LSI High Speed Mirror Goniometer	6440	146928	VBU	VBU
Extech Stopwatch	365510	146530	04/19/12	04/19/13
Newport Thermohygrometer	iTHX-SD	146961	02/23/12	02/23/13
Yokogawa Power Analyzer	WT210	146919	11/18/11	11/18/12
Omega Temperature Meter	Dpi8-C24	146920	11/18/11	11/18/12
Elgar AC Power Supply	CW1251P	146918	VBU	VBU

TEST METHODS

Seasoning in Sample Orientation – Fluorescent Products

The lamp was seasoned 100 hours prior to testing per LM-54-99.

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 Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

Estimated Total Operating Time

Model No.	Total Hours
Fi4550A	2

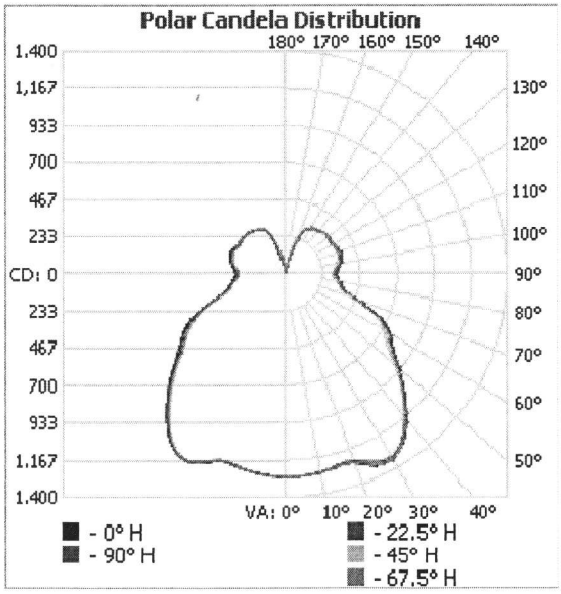
RESULTS OF TESTS

Photometric and Electrical Measurements – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (A)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
			Fi4550A				
CHI1207031558-002	UP	120.0	1.146	113.3	0.823	6772	59.76

Intensity (Candlepower) Summary at 25℃ - Candelas

Angle	0	22.5	45	67.5	90
			Fi4550A		
0	1274	1274	1274	1274	1274
5	1270	1270	1271	1270	1269
10	1263	1264	1263	1262	1257
15	1250	1251	1249	1246	1239
20	1260	1258	1256	1254	1244
25	1327	1321	1317	1309	1299
30	1341	1335	1340	1333	1319
35	1288	1278	1278	1277	1267
40	1181	1167	1162	1168	1161
45	1055	1041	1029	1045	1044
50	930	912	894	919	925
55	822	802	774	800	812
60	757	736	707	728	734
65	661	644	620	636	641
70	485	473	458	466	472
75	376	364	351	359	370
80	352	343	330	335	342
85	329	319	306	310	315
90	319	306	295	299	301
95	331	318	307	312	314
100	348	336	323	328	333
105	363	352	337	341	346
110	370	361	347	349	354
115	366	360	350	351	350
120	357	354	351	347	342
125	352	353	353	347	340
130	354	356	356	349	347
135	354	356	355	350	352
140	348	347	347	343	342
145	342	341	344	335	330
150	332	332	334	324	324
155	309	308	309	298	305
160	257	251	262	235	244
165	126	158	177	148	108
170	36	44	54	41	32
175	12	12	12	12	12
180	7	7	7	7	7

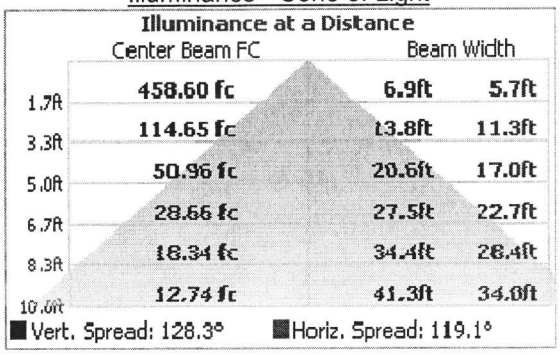


RESULTS OF TESTS (cont'd)

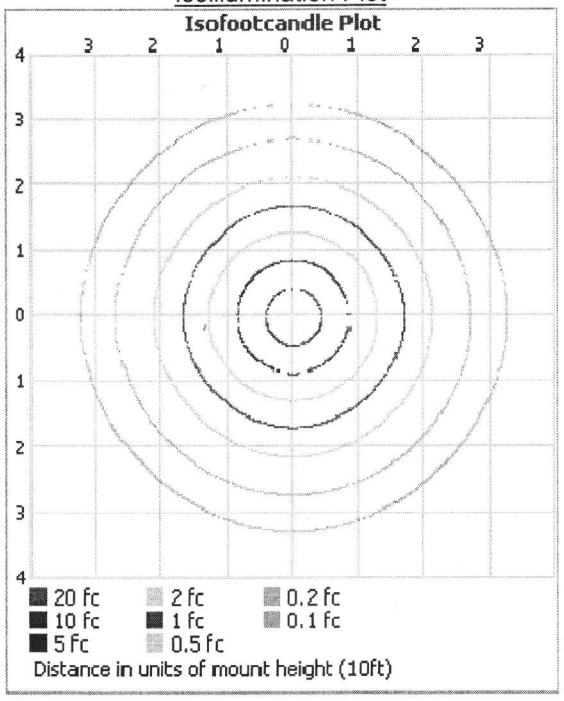
Illumination Plots

Model No.: Fi4550A
Mounting Height: 10 Ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25℃

Zone	Lumens	% Luminaire
	Fi4550A	
0-30	1077	15.9
0-40	1865	27.5
0-60	3382	49.9
60-90	1353	20.0
0-90	4735	69.9
90-180	2038	30.1
0-180	6772	100.0

RESULTS OF TESTS (cont'd)

Zonal Lumens and Percentages at 25℃

Zone	Lumens	% Luminaire
	Fi4550A	
0-10	120.8	1.8
10-20	352.9	5.2
20-30	602.9	8.9
30-40	788.3	11.6
40-50	797.3	11.8
50-60	719.8	10.6
60-70	610.3	9.0
70-80	398.6	5.9
80-90	343.9	5.1
90-100	342.7	5.1
100-110	363.7	5.4
110-120	350.7	5.2
120-130	313.7	4.6
130-140	270.4	4.0
140-150	210.6	3.1
150-160	138.8	2.0
160-170	44.8	0.7
170-180	2.2	0.0