REPORT

545 E. ALGONQUIN ROAD ARLINGTON HEIGHTS, IL 60005

Project No. G100766137 Date: September 26, 2012

REPORT NO. 100766137CHI-003

TEST OF ONE CEILING-MOUNT COMPACT FLUORESCENT LUMINAIRE

FIXTURE MODEL NO. APD.34
BALLAST MODEL NO.FULHAM WH-22-120-C

RENDERED TO

LUMENART LTD
3333 W 47TH STREET
CHICAGO, IL 60632

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

AUTHORIZATION: The testing performed was authorized by signed quote number Q500383499.

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

DESCRIPTION OF SAMPLE: The client submitted one sample of model number APD.34. The sample was received by Intertek on August 6, 2012, in undamaged condition, and one sample was tested as received. The sample designation was CHI1208061220-001 for the luminaire, CHI1208061234-001 for the backplate, and CHI1208061216-001 for the glass.

DATES OF TEST: September 11, 2012

SUMMARY

Model No.:	APD.34
Description:	Pendant-mount compact fluorescent luminaire with 1x26W CFL.

Criteria	Result
Total Lumen Output	1398 Lumens
Total Power	26.06W
Luminaire Efficacy	53.63
Power Factor	0.948

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Calibration Date	Calibration Due Date
Yokogawa Power Meter	WT210	146919	11/18/2011	11/18/2012
Omega Thermometer	DPI8-C24	146920	11/18/2011	11/18/2012
LSI High Speed Mirror Goniometer	6440T	146928	VBU	VBU
Newport Hygrometer	iServer	146961	2/23/2012	2/23/2013
Elgar, AC Power Supply	CW1251P	146918	VBU	VBU
Extech	365510	146830	2/16/2012	2/16/2013

TEST METHODS

Seasoning in Sample Orientation – CFL Products

Seasoning was performed in accordance with IESNA LM-66.

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
APD.34	1

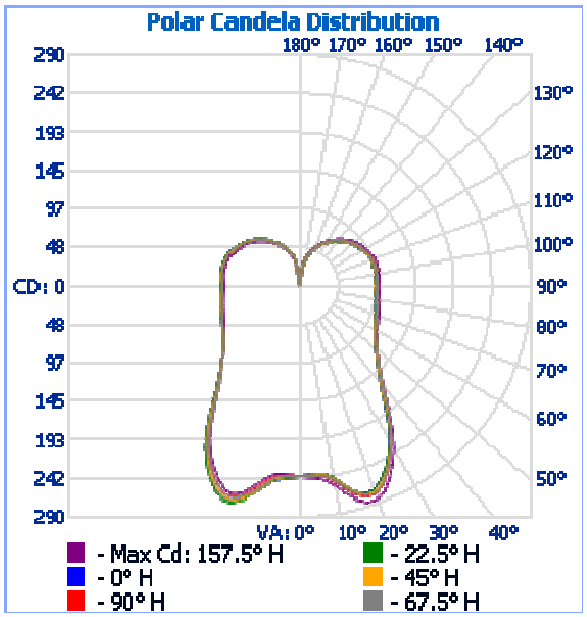
RESULTS OF TESTS

Photometric and Electrical Measurements – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
APD.34							
CHI1208061220-001	Up	120.1	228.8	26.06	0.948	1398	53.63

Intensity (Candlepower) Summary at 25℃ - Candelas

Angle	0	22.5	45	67.5	90
APD.34					
0	240	240	240	240	240
5	238	238	239	240	239
10	245	245	246	248	249
15	267	267	267	269	271
20	272	273	275	277	278
25	254	254	257	258	259
30	226	227	228	230	229
35	187	189	191	194	192
40	157	158	158	160	159
45	138	138	139	140	140
50	124	124	125	126	126
55	114	115	116	116	117
60	108	109	109	110	110
65	104	104	105	106	106
70	101	101	102	103	103
75	99	99	100	100	101
80	97	97	98	98	99
85	95	95	96	97	97
90	94	94	95	95	96
95	95	96	96	97	98
100	96	96	97	98	98
105	96	96	97	97	98
110	95	95	96	96	97
115	93	93	93	94	95
120	90	90	91	92	92
125	87	87	88	88	89
130	83	83	83	84	85
135	78	78	79	80	80
140	73	73	73	74	74
145	67	67	68	68	69
150	61	61	61	62	62
155	54	54	55	55	56
160	47	47	48	48	48
165	38	38	40	40	41
170	29	28	29	30	30
175	14	13	13	12	10
180	1	1	1	1	1

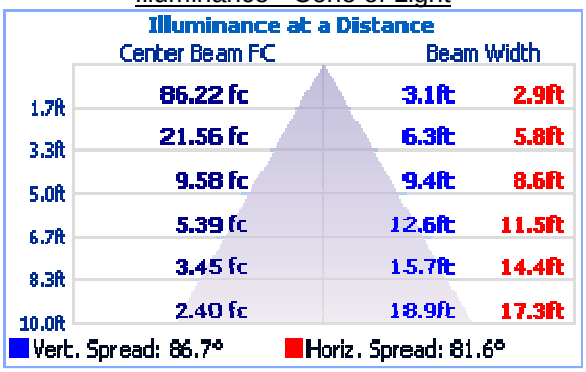


RESULTS OF TESTS (cont'd)

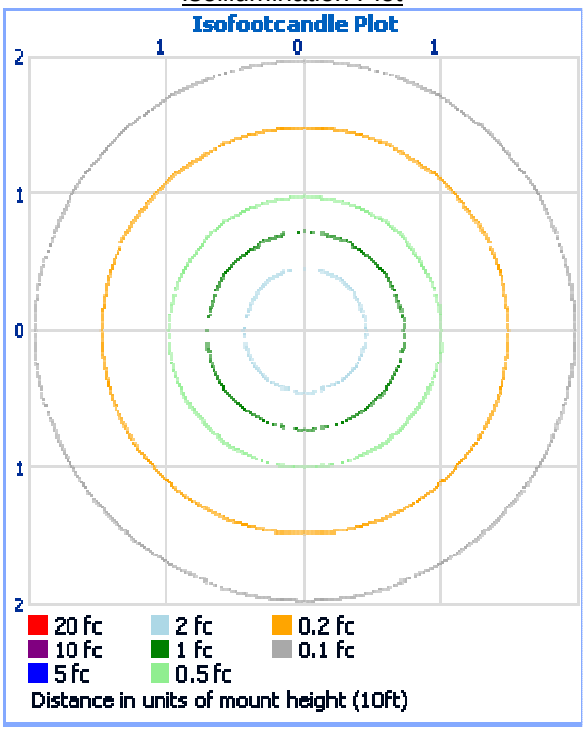
Illumination Plots

Model No.: APD.34
Mounting Height: 10 ft.

Illuminance - Cone of Light



Isoillumination Plot



Zonal Lumen Summary and Percentages at 25℃

Zone	Lumens	% Luminaire
APD.34		
0-30	218.4	15.6
0-40	338.6	24.2
0-60	551.3	39.4
60-90	318.5	22.8
0-90	869.7	62.2
90-180	528.0	37.8
0-180	1398	100.0

RESULTS OF TESTS (cont'd)

Zonal Lumens and Percentages at 25℃

Zone	Lumens	% Luminaire
APD.34		
0-10	23.2	1.7
10-20	76.7	5.5
20-30	118.5	8.5
30-40	120.3	8.6
40-50	108.0	7.7
50-60	104.6	7.5
60-70	105.5	7.6
70-80	106.8	7.6
80-90	106.2	7.6
90-100	106.3	7.6
100-110	103.7	7.4
110-120	94.2	6.7
120-130	79.7	5.7
130-140	61.8	4.4
140-150	43.1	3.1
150-160	25.8	1.8
160-170	11.6	0.8
170-180	1.8	0.1

Pictures (not to scale)

APD.34 Assembled

APD.34 base with glass.

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:

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Report Reviewed By:

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Lighting Division