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Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
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United States

Catalog Number
4PR-L40/835-DIM-UNV-L-M-OF-WH

Order Number
12316380
Test Number
12316380.35

Test Date

2018-06-14

Prepared By

Josh Mitchell, Technician

Approved By

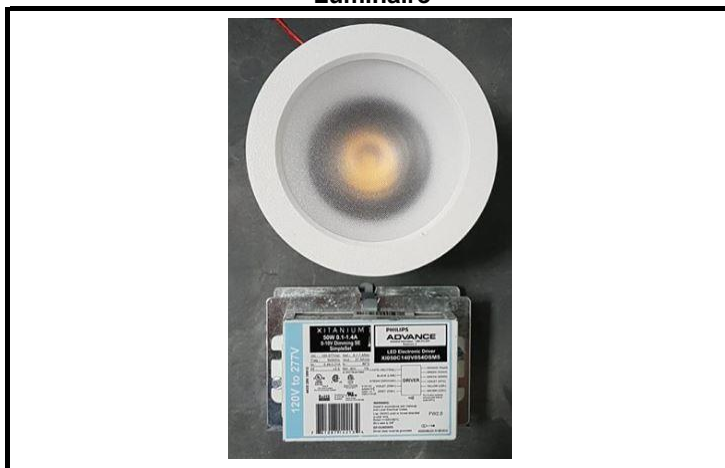
Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Black formed aluminum housing, clear plastic optic, white reflector, clear glass patterned lens enclosure
Lamp: One white LED
Mounting: Recessed
Ballast/Driver: Philips XI050C140V054DSM5

Luminaire



Luminaire Characteristics

Luminous Diameter: 4.25 in.

Summary of Results

Total Luminaire Output:	3538 Lumens
Luminaire Efficacy:	76 lm/w
Maximum Candela:	8759 Candela

Test Conditions

Test Temperature:	25.5 °C
Voltage:	120.0 VAC
Current:	0.3885 A
Power:	46.54 W
Power Factor:	0.998
Frequency:	60 Hz
Current THD:	5.20 %

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

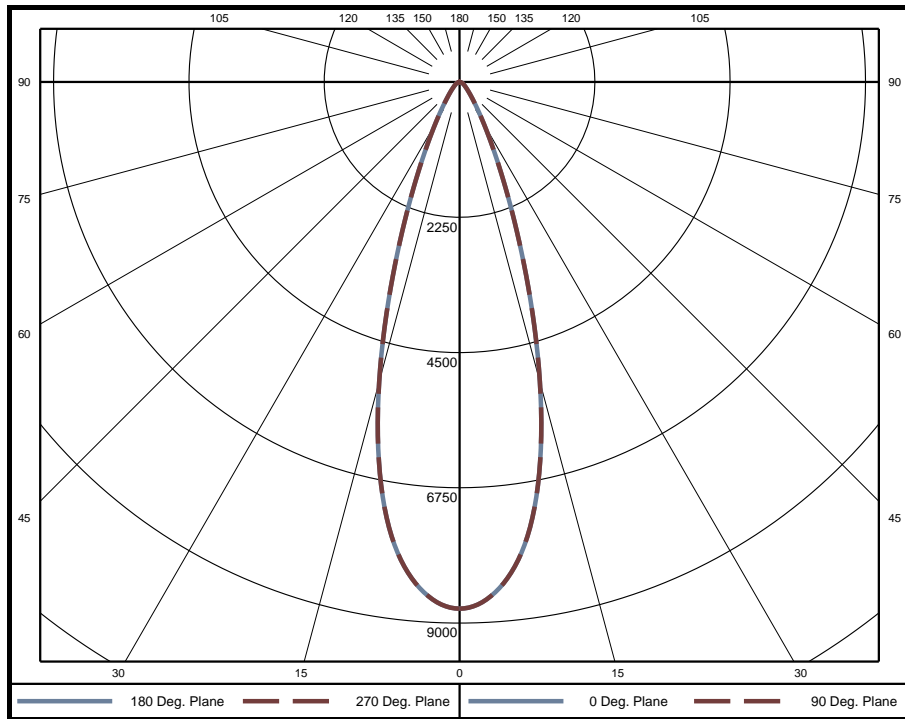
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.5 °C	120.0 VAC	0.3885 A	46.54 W	0.998	60 Hz	5.20 %

Summary of Results

Spacing Criteria
 0-180: 0.56
 90-270: 0.56

Total Lumen Output: 3538 Lumens
Luminaire Efficacy: 76.0 lm/w
Maximum Candela: 8759 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	204.8	5.8%	60-65	32.9	0.9%	120-125	0	0.0%
5-10	557.6	15.8%	65-70	26.4	0.7%	125-130	0	0.0%
10-15	730.5	20.6%	70-75	19.8	0.6%	130-135	0	0.0%
15-20	660.2	18.7%	75-80	13.3	0.4%	135-140	0	0.0%
20-25	460.2	13.0%	80-85	6.7	0.2%	140-145	0	0.0%
25-30	287.9	8.1%	85-90	1.5	0.0%	145-150	0	0.0%
30-35	180.0	5.1%	90-95	0	0.0%	150-155	0	0.0%
35-40	118.5	3.3%	95-100	0	0.0%	155-160	0	0.0%
40-45	84.3	2.4%	100-105	0	0.0%	160-165	0	0.0%
45-50	63.4	1.8%	105-110	0	0.0%	165-170	0	0.0%
50-55	49.7	1.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	40.2	1.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	3200	90.4%
0-60	3437	97.2%
0-90	3538	100.0%
90-180	0	0.0%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	8759	8759	8759	8759	8759	8759	8759	8759	8759	8759	8759	8759	8759	8759	8759	8759
5	8372	8372	8372	8372	8372	8372	8372	8372	8372	8372	8372	8372	8372	8372	8372	8372
10	7183	7183	7183	7183	7183	7183	7183	7183	7183	7183	7183	7183	7183	7183	7183	7183
15	5160	5160	5160	5160	5160	5160	5160	5160	5160	5160	5160	5160	5160	5160	5160	5160
20	3011	3011	3011	3011	3011	3011	3011	3011	3011	3011	3011	3011	3011	3011	3011	3011
25	1567	1567	1567	1567	1567	1567	1567	1567	1567	1567	1567	1567	1567	1567	1567	1567
30	819	819	819	819	819	819	819	819	819	819	819	819	819	819	819	819
35	456	456	456	456	456	456	456	456	456	456	456	456	456	456	456	456
40	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279
45	187	187	187	187	187	187	187	187	187	187	187	187	187	187	187	187
50	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133
55	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99
60	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77
65	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
70	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
75	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
80	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
85	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)

	0	45	90
0	957000	957000	957000
45	28840	28840	28840
55	18840	18840	18840
65	15390	15390	15390
75	13240	13240	13240
85	8283	8283	8283



Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89
3	104	98	94	90	102	97	93	89	94	91	88	92	89	86	90	87	85	84
4	100	93	88	84	98	92	87	84	90	86	83	88	84	82	86	83	81	79
5	96	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75
6	92	84	79	75	90	83	78	75	82	77	74	80	77	74	79	76	73	72
7	88	80	75	71	87	79	75	71	78	74	71	77	73	70	76	73	70	69
8	85	77	71	68	84	76	71	68	75	71	68	74	70	67	73	70	67	66
9	82	74	68	65	81	73	68	65	72	68	65	71	67	64	71	67	64	63
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	64	62	61

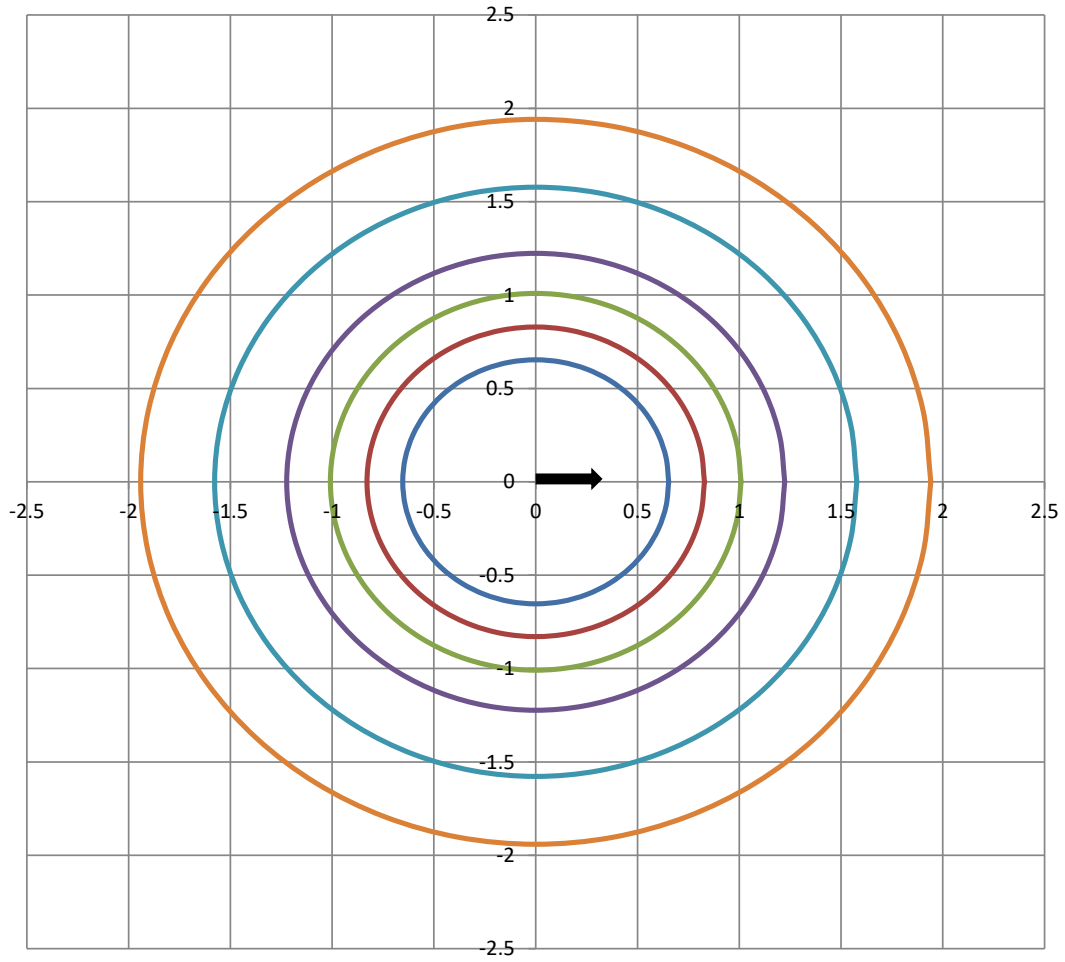
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	8759 Candela
Central Cone Intensity:	8621 Candela
Beam Flux:	1741.8 Lumens
Beam Angle (0-180):	33.5 Degrees
Beam Angle (90-270):	33.5 Degrees
Field Angle (0-180):	58.9 Degrees
Field Angle (90-270):	58.9 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		547	2.23
6.00		243	3.35
8.00		137	4.46
10.0		87.6	5.58
12.0		60.8	6.69
14.0		44.7	7.81
16.0		34.2	8.92



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

