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Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-10-2014

Prepared For
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831 W Fairview Ave
PO Box 837
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United States

Catalog Number
2AS-L12/835-DIM-UNV-RN-OF-WH-x-xx (45° TILT)
Order Number
13257190
Test Number
13257190.40

Test Date

2020-03-23

Prepared By

Jesse Litchfield, Technician

Approved By

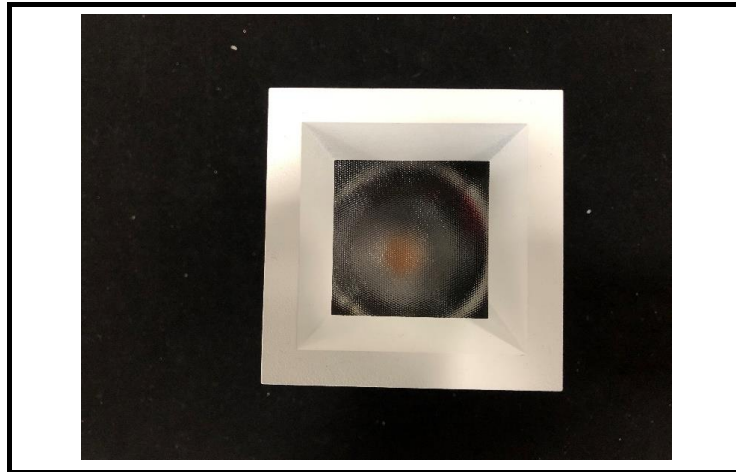
Alexa Lambert, Project Handler

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Luminaire Description: Aluminum housing, optics, and trim enclosure
Lamp: One white LED
Mounting: Recessed
Ballast/Driver: One Philips Advance XI025C070V054DSM1 Driver

Luminaire



Luminaire Characteristics

Luminous Length: 2.50 in.
Luminous Width: 2.500 in.

Summary of Results

Total Luminaire Output:	752.0 Lumens
Luminaire Efficacy:	35.3 lm/w
Maximum Candela:	7860 Candela

Test Conditions

Test Temperature:	24.8 °C
Voltage:	120.0 VAC
Current:	0.1783 A
Power:	21.28 W
Power Factor:	0.995
Frequency:	60 Hz
Current THD:	8.68 %

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



Distribution - Goniophotometer

Distribution Test Conditions

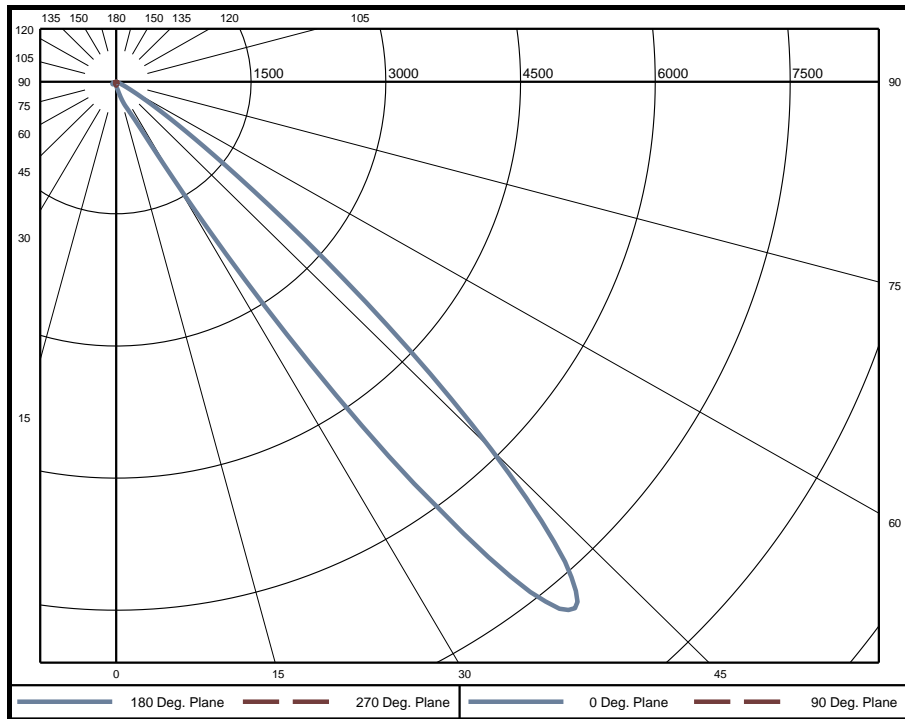
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	120.0 VAC	0.1783 A	21.28 W	0.995	60 Hz	8.68 %

Summary of Results

Spacing Criteria
 0-180: 3.53
 90-270: 0.62

Total Lumen Output: 752.0 Lumens
Luminaire Efficacy: 35.3 lm/w
Maximum Candela: 7860 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.0	0.1%	60-65	14.0	1.9%	120-125	0	0.0%
5-10	3.0	0.4%	65-70	9.7	1.3%	125-130	0	0.0%
10-15	5.3	0.7%	70-75	6.5	0.9%	130-135	0	0.0%
15-20	9.6	1.3%	75-80	3.4	0.5%	135-140	0	0.0%
20-25	16.5	2.2%	80-85	1.7	0.2%	140-145	0	0.0%
25-30	29.1	3.9%	85-90	0.5	0.1%	145-150	0	0.0%
30-35	76.3	10.1%	90-95	0	0.0%	150-155	0	0.0%
35-40	170.1	22.6%	95-100	0	0.0%	155-160	0	0.0%
40-45	197.3	26.2%	100-105	0	0.0%	160-165	0	0.0%
45-50	127.2	16.9%	105-110	0	0.0%	165-170	0	0.0%
50-55	55.9	7.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	24.9	3.3%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	311	41.3%
0-60	716	95.2%
0-90	752	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	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
	5	60	56	51	44	40	37	34	33	33	34	37	40	44	51	56
	10	89	75	54	39	32	30	27	27	26	27	27	30	32	39	54
	15	161	114	54	33	26	24	23	25	25	25	23	24	26	33	54
	20	283	189	73	29	23	21	23	25	27	25	23	21	23	29	73
	25	441	260	106	27	21	20	24	28	29	28	24	20	21	27	106
	30	1254	363	113	25	20	20	26	31	33	31	26	20	20	25	113
	35	4769	496	84	21	18	20	28	34	37	34	28	20	18	21	84
	40	7829	540	52	18	17	21	30	37	40	37	30	21	17	18	52
	45	5901	393	32	16	16	22	32	40	43	40	32	22	16	16	32
	50	2476	203	23	13	15	23	33	42	46	42	33	23	15	13	23
	55	753	84	17	11	15	22	34	45	50	45	34	22	15	11	17
	60	201	34	12	10	14	21	32	46	52	46	32	21	14	10	12
	65	50	16	9	9	11	18	28	43	49	43	28	18	11	9	9
	70	14	9	6	7	9	14	22	35	39	35	22	14	9	7	6
	75	5	4	4	4	5	9	14	22	23	22	14	9	5	4	4
	80	2	2	2	2	2	4	7	10	11	10	7	4	2	2	2
	85	1	1	1	1	1	2	3	4	5	4	3	2	1	1	1
	90	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
	100	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
	110	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
	120	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
	130	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
	140	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
	150	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
	160	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
	170	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
	180	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	10620	10620
	45	2070000	11210
	55	325700	7289
	65	29390	5109
	75	4476	3540
	85	2722	2360



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	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74
3	93	83	75	69	90	81	74	69	78	72	67	76	71	66	73	69	65	63
4	84	73	64	58	82	72	64	58	69	62	57	67	61	56	65	60	55	53
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38
7	64	50	41	35	62	50	41	35	48	40	35	46	40	34	45	39	34	32
8	59	45	36	30	57	44	36	30	43	35	30	41	35	29	40	34	29	27
9	54	40	31	26	52	39	31	26	38	31	25	37	30	25	36	30	25	23
10	50	36	28	22	48	35	27	22	34	27	22	33	27	22	32	26	22	20

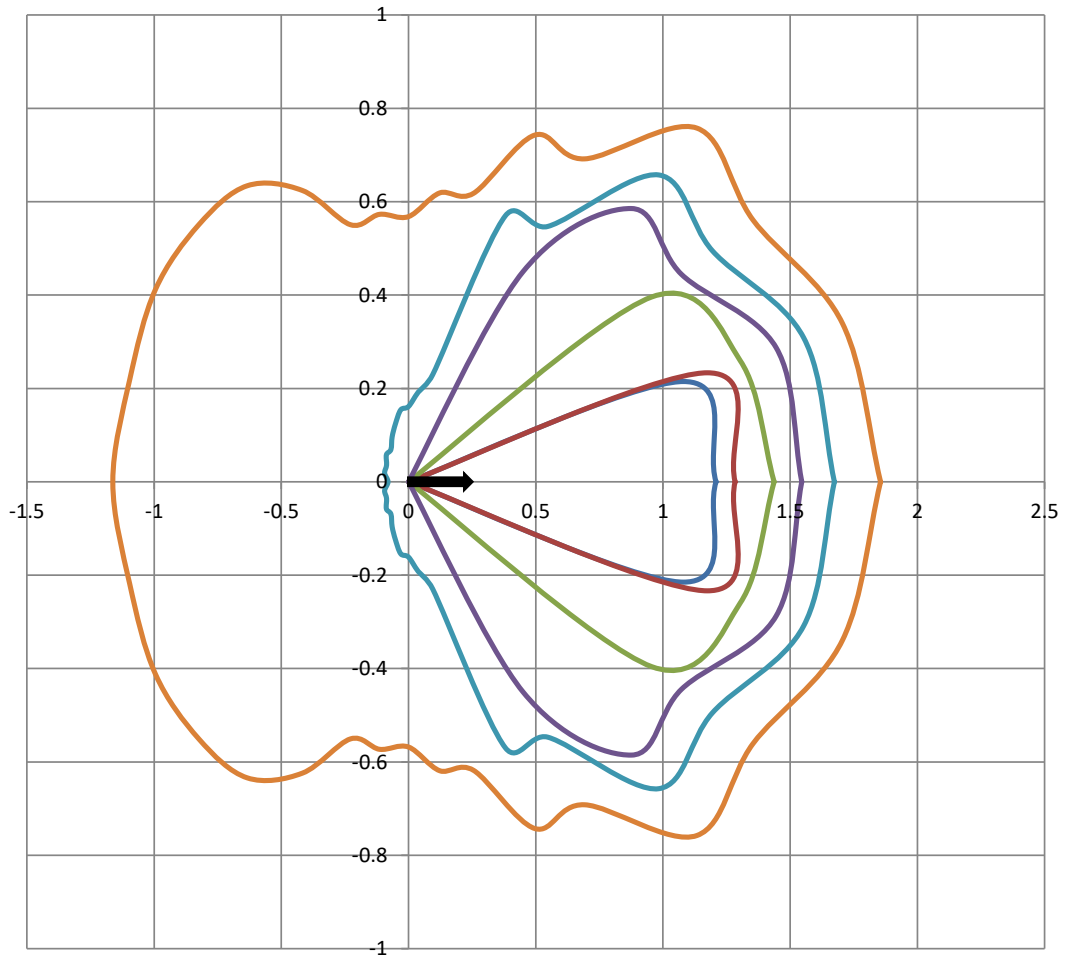
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	43 Candela
Central Cone Intensity:	43 Candela
Beam Flux:	721.8 Lumens
Beam Angle (0-180):	143.5 Degrees
Beam Angle (90-270):	47.8 Degrees
Field Angle (0-180):	160.8 Degrees
Field Angle (90-270):	151.2 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		2.68	10.8
6.00		1.19	16.2
8.00		0.669	21.7
10.0		0.428	27.1
12.0		0.297	32.5
14.0		0.218	37.9
16.0		0.167	43.3



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

10 fc 5 fc 2 fc 1 fc 0.5 fc 0.2 fc