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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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United States

Catalog Number
2AS-L12/835-DIM-UNV-RM-OF-WH-x-xx (45° TILT)
Order Number
13257190
Test Number
13257190.36

Test Date

2020-03-20

Prepared By

Jesse Litchfield, Technician

Approved By

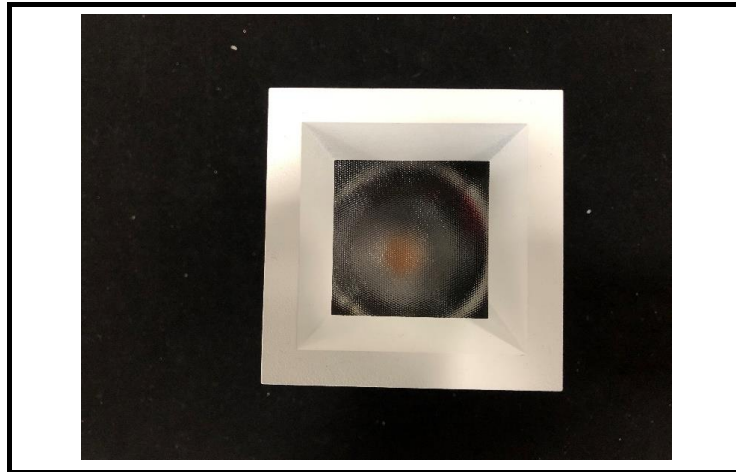
Alexa Lambert, Project Handler

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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:	616.7 Lumens
Luminaire Efficacy:	29 lm/w
Maximum Candela:	4924 Candela

Test Conditions

Test Temperature:	24.6 °C
Voltage:	120.1 VAC
Current:	0.1779 A
Power:	21.25 W
Power Factor:	0.995
Frequency:	60 Hz
Current THD:	8.71 %

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
24.6 °C	120.1 VAC	0.1779 A	21.25 W	0.995	60 Hz	8.71 %

Summary of Results

Spacing Criteria

0-180: 3.03

90-270: 0.90

Total Lumen Output:

616.7 Lumens

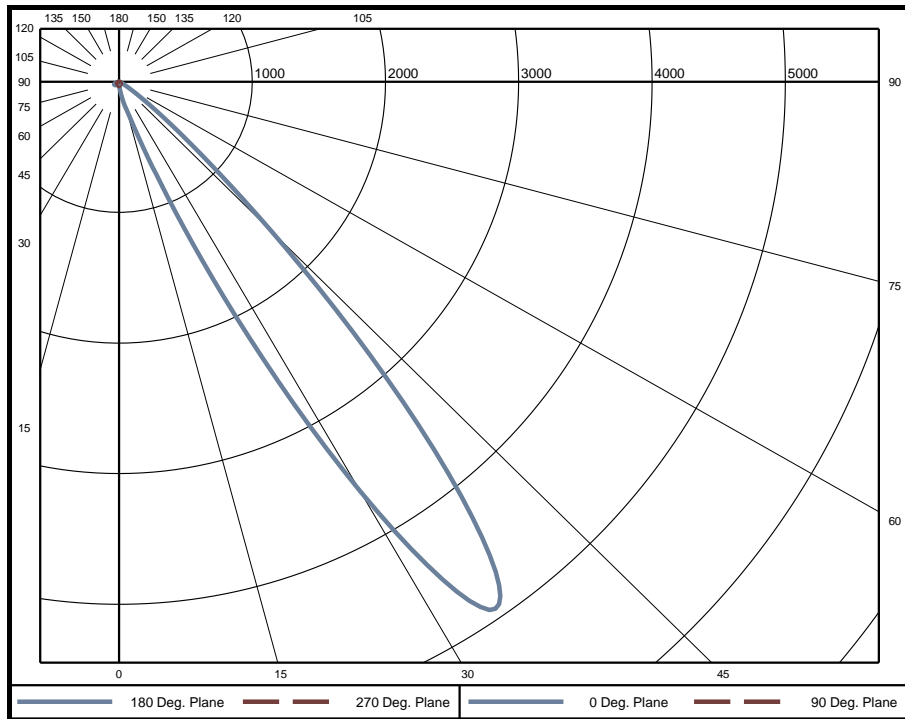
Luminaire Efficacy:

29.0 lm/w

Maximum Candela:

4924 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.8	0.1%	60-65	10.5	1.7%	120-125	0	0.0%
5-10	2.8	0.5%	65-70	8.2	1.3%	125-130	0	0.0%
10-15	6.7	1.1%	70-75	5.4	0.9%	130-135	0	0.0%
15-20	14.6	2.4%	75-80	2.5	0.4%	135-140	0	0.0%
20-25	36.3	5.9%	80-85	1.1	0.2%	140-145	0	0.0%
25-30	83.6	13.6%	85-90	0.3	0.0%	145-150	0	0.0%
30-35	135.7	22.0%	90-95	0	0.0%	150-155	0	0.0%
35-40	140.0	22.7%	95-100	0	0.0%	155-160	0	0.0%
40-45	91.3	14.8%	100-105	0	0.0%	160-165	0	0.0%
45-50	43.0	7.0%	105-110	0	0.0%	165-170	0	0.0%
50-55	20.8	3.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	13.3	2.2%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	421	68.2%
0-60	589	95.5%
0-90	617	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	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
	5	50	47	41	36	32	29	27	25	25	27	29	32	36	41	47
	10	118	96	61	36	28	25	23	21	21	21	23	25	28	36	61
	15	229	189	105	39	25	21	20	19	19	19	20	21	25	39	105
	20	557	364	150	46	23	20	19	20	20	20	19	20	23	46	150
	25	1652	787	179	45	22	19	20	22	24	22	20	19	22	45	179
	30	3620	1196	155	32	21	19	22	26	28	26	22	19	21	32	155
	35	4924	1123	90	24	20	20	25	30	32	30	25	20	20	24	90
	40	3682	697	50	21	18	21	28	33	35	33	28	21	18	21	50
	45	1614	318	34	18	18	22	30	36	38	36	30	22	18	18	34
	50	512	112	24	16	18	23	31	38	40	38	31	23	18	16	24
	55	148	41	17	14	18	23	31	39	43	39	31	23	18	14	17
	60	47	20	12	13	17	22	29	39	42	39	29	22	17	13	12
	65	21	12	9	11	14	18	25	34	37	34	25	18	14	11	9
	70	9	7	6	8	10	14	18	25	29	25	18	14	10	8	6
	75	4	4	3	4	5	8	11	14	15	14	11	8	5	4	3
	80	2	2	2	1	2	3	4	6	6	6	4	3	2	1	2
	85	1	1	1	1	1	1	2	2	3	2	2	1	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	8211	8211
	45	566000	11800
	55	63900	7396
	65	12090	5185
	75	3708	3227
	85	2441	1998



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	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68
4	88	77	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59
5	81	70	62	56	79	69	61	55	66	60	55	65	59	54	63	58	54	52
6	75	63	54	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	59	46	38	33	58	46	38	33	44	38	33	43	37	33	42	37	32	31
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29	27

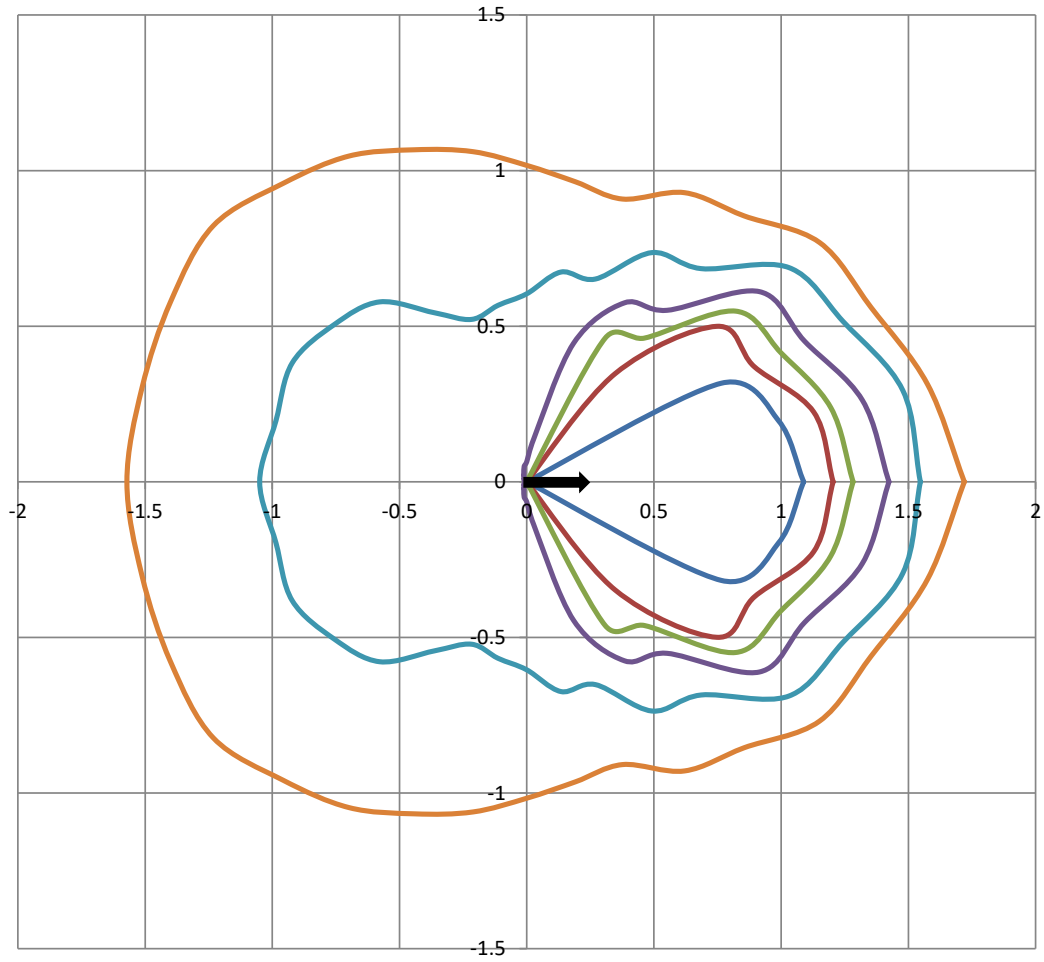
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	33 Candela
Central Cone Intensity:	34 Candela
Beam Flux:	600.5 Lumens
Beam Angle (0-180):	141.1 Degrees
Beam Angle (90-270):	120.0 Degrees
Field Angle (0-180):	160.0 Degrees
Field Angle (90-270):	152.8 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		2.07	9.65
6.00		0.920	14.5
8.00		0.517	19.3
10.0		0.331	24.1
12.0		0.230	29.0
14.0		0.169	33.8
16.0		0.129	38.6



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

