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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
2AR-L12/835-DIM-UNV-RN-OF-WH-x-xx (0° TILT)
Order Number
13257190
Test Number
13257190.21

Test Date

2020-03-18

Prepared By

Jesse Litchfield, Technician

Approved By

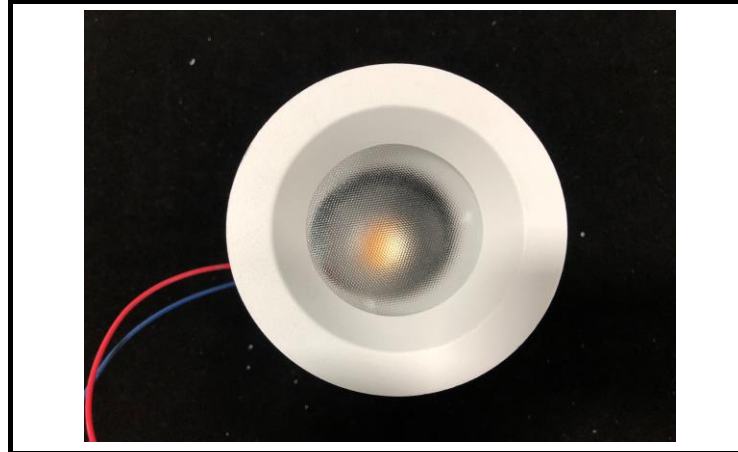
Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Aluminum housing, optics, and trim enclosure
Lamp: One white LED
Mounting: Recessed
Ballast/Driver: One Philips Advance XI025C070V054DSM1 Driver

Luminaire



Luminaire Characteristics
Luminous Diameter: 2.50 in.

Summary of Results

Total Luminaire Output:	936.9 Lumens
Luminaire Efficacy:	44.8 lm/w
Maximum Candela:	12936 Candela

Test Conditions

Test Temperature:	24.6 °C
Voltage:	120.0 VAC
Current:	0.1753 A
Power:	20.92 W
Power Factor:	0.995
Frequency:	60 Hz
Current THD:	8.87 %

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



Distribution - Goniophotometer

Distribution Test Conditions

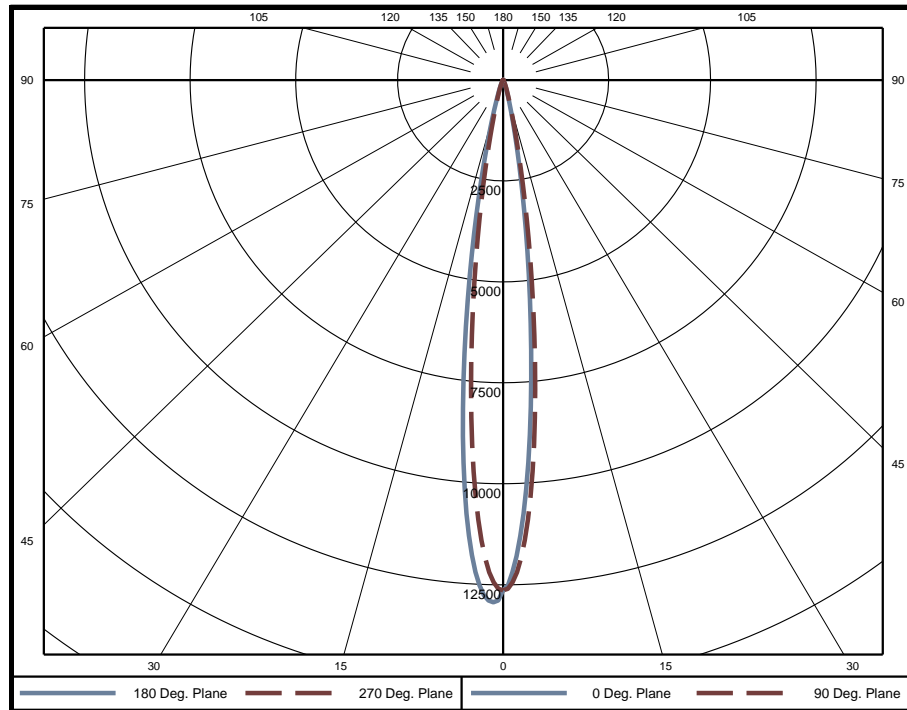
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.6 °C	120.0 VAC	0.1753 A	20.92 W	0.995	60 Hz	8.87 %

Summary of Results

Spacing Criteria
0-180: 0.20
90-270: 0.23

Total Lumen Output: 936.9 Lumens
Luminaire Efficacy: 44.8 lm/w
Maximum Candela: 12936 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	251.3	26.8%	60-65	4.0	0.4%	120-125	0	0.0%
5-10	367.4	39.2%	65-70	2.9	0.3%	125-130	0	0.0%
10-15	165.0	17.6%	70-75	1.7	0.2%	130-135	0	0.0%
15-20	59.1	6.3%	75-80	0.6	0.1%	135-140	0	0.0%
20-25	28.1	3.0%	80-85	0.3	0.0%	140-145	0	0.0%
25-30	14.9	1.6%	85-90	0.1	0.0%	145-150	0	0.0%
30-35	9.6	1.0%	90-95	0	0.0%	150-155	0	0.0%
35-40	7.6	0.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	6.9	0.7%	100-105	0	0.0%	160-165	0	0.0%
45-50	6.5	0.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	6.0	0.6%	110-115	0	0.0%	170-175	0	0.0%
55-60	5.0	0.5%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	903	96.4%
0-60	927	99.0%
0-90	937	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	12640	12640	12640	12640	12640	12640	12640	12640	12640	12640	12640	12640	12640	12640	12640
	5	7406	7117	7393	7760	8388	9157	9758	10210	10160	10210	9758	9157	8388	7760	7393
	10	2126	2000	2132	2294	2600	3063	3496	3897	3839	3897	3496	3063	2600	2294	2132
	15	487	464	500	532	582	681	784	880	887	880	784	681	582	532	500
	20	169	163	176	183	204	228	247	261	259	261	247	228	204	183	176
	25	68	67	70	75	83	92	99	105	104	105	99	92	83	75	70
	30	32	33	34	38	41	45	48	51	50	51	48	45	41	38	34
	35	20	21	22	24	27	30	31	32	32	32	31	30	27	24	22
	40	14	16	16	19	21	23	24	24	24	24	24	23	21	19	16
	45	12	13	14	16	18	19	20	21	20	21	20	19	18	16	14
	50	11	12	12	14	15	16	17	18	17	18	17	16	15	14	12
	55	10	11	11	11	13	13	14	14	14	14	14	13	13	11	11
	60	9	9	9	9	9	10	10	11	10	11	10	9	9	9	9
	65	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	70	4	4	4	4	4	5	5	5	4	5	5	5	4	4	4
	75	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	80	0	0	1	1	1	1	1	0	1	1	1	1	1	1	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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)

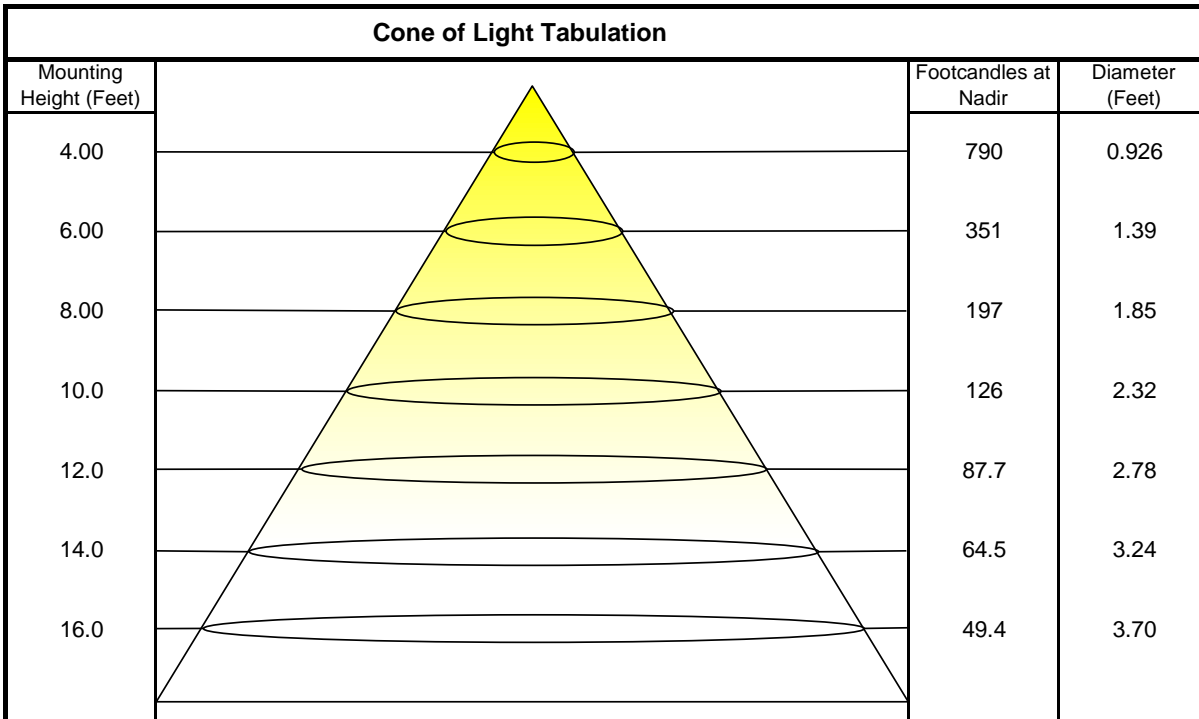
Vertical Angle (Degrees)	0	45	90
	0	3990000	3990000
	45	5416	6105
	55	5560	6213
	65	5050	5019
	75	852	2356
	85	0	848



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	116	114	112	111	113	112	110	109	108	107	105	104	103	102	101	100	99	98
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92
5	105	100	97	94	104	99	96	94	98	95	93	96	94	92	95	93	92	91
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89
7	101	96	93	90	100	96	92	90	95	92	90	94	91	89	93	91	89	88
8	100	94	91	89	99	94	91	89	93	90	88	92	90	88	92	89	88	87
9	98	93	90	88	97	92	89	87	92	89	87	91	89	87	90	88	87	86
10	97	91	88	86	96	91	88	86	91	88	86	90	88	86	89	87	86	85

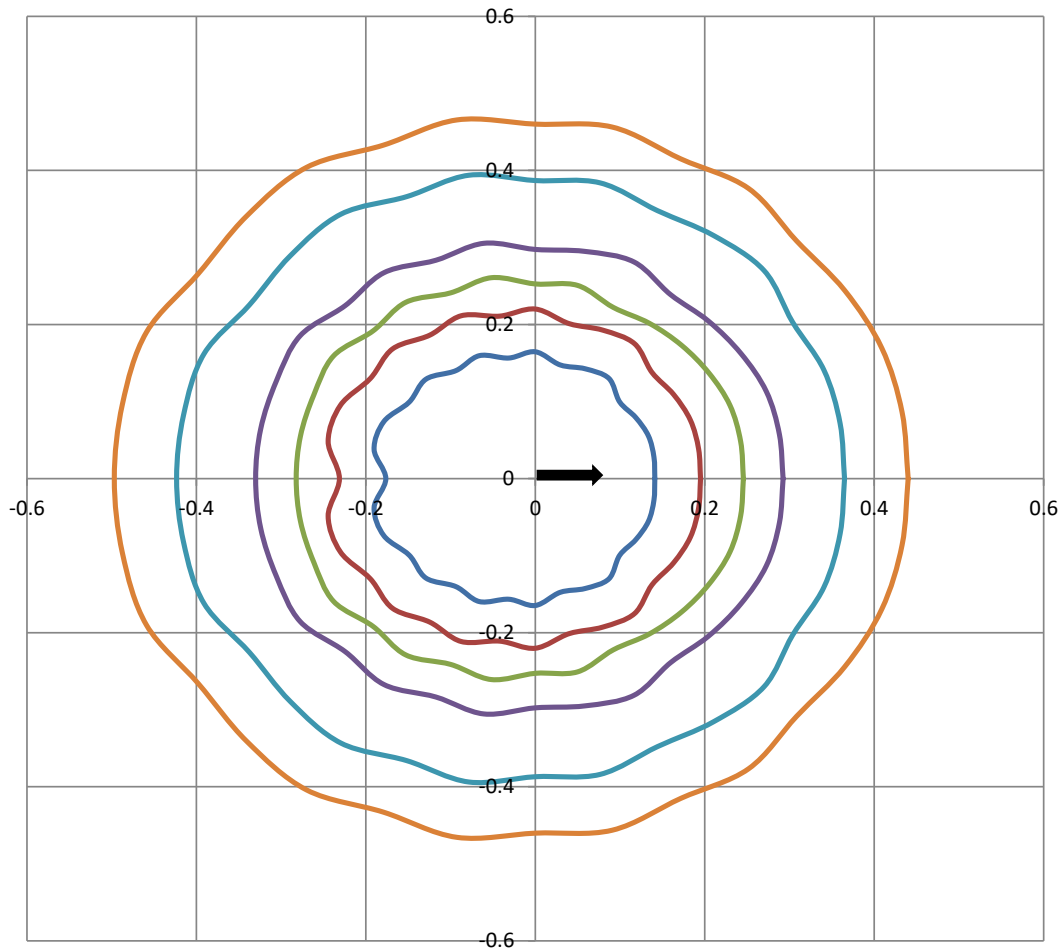
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	12640 Candela
Central Cone Intensity:	11120 Candela
Beam Flux:	399.3 Lumens
Beam Angle (0-180):	13.7 Degrees
Beam Angle (90-270):	13.0 Degrees
Field Angle (0-180):	25.5 Degrees
Field Angle (90-270):	24.7 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

50 fc 20 fc 10 fc 5 fc 2 fc 1 fc