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Indoor Distribution Test Report

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

Prepared For
H E Williams Inc
831 W Fairview Ave
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United States

Catalog Number
2AS-L12/835-DIM-UNV-LN-OF-WH-x-xx (0° TILT)
Order Number
13257190
Test Number
13257190.37

Test Date

2020-03-23

Prepared By

Jesse Litchfield, Technician

Approved By

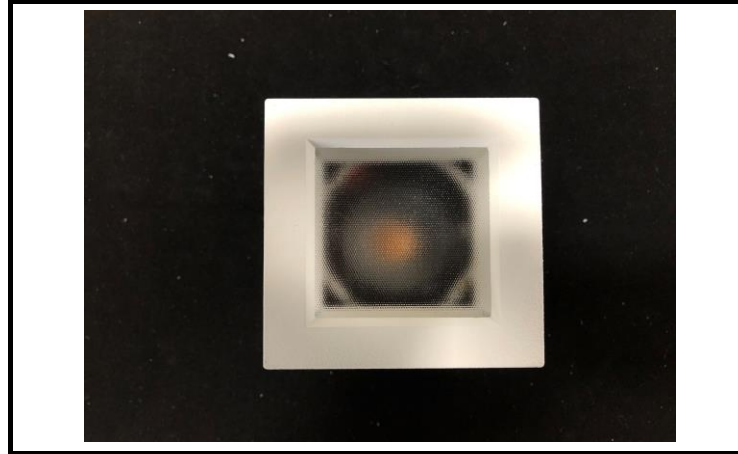
Alexa Lambert, Project Handler

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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: 1084 Lumens
Luminaire Efficacy: 50.9 lm/w
Maximum Candela: 13747 Candela

Test Conditions

Test Temperature: 24.7 °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

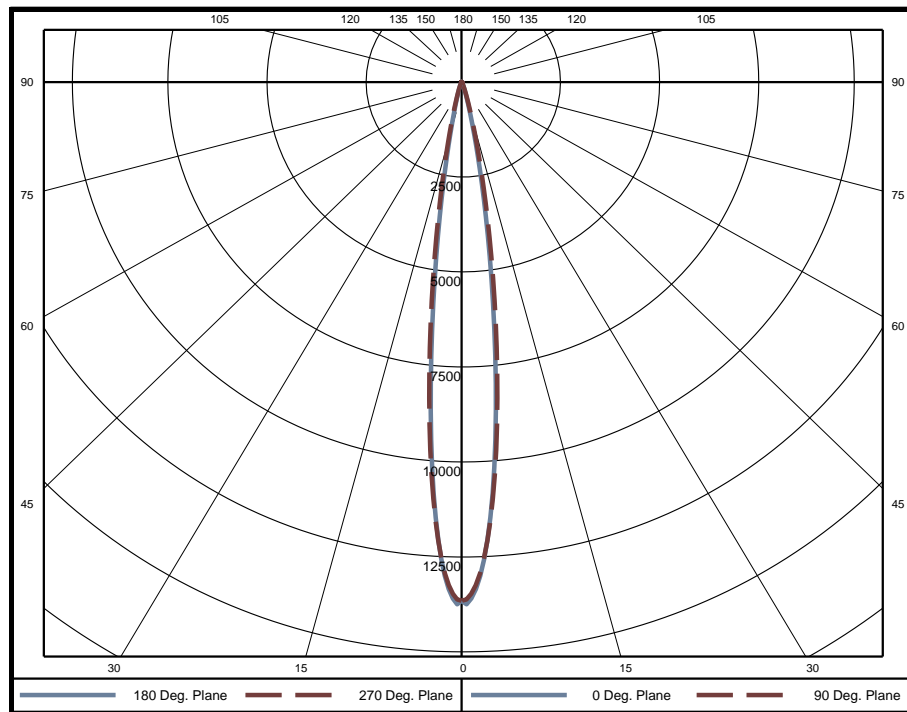
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	120.0 VAC	0.1783 A	21.28 W	0.995	60 Hz	8.68 %

Summary of Results

Spacing Criteria
 0-180: 0.23
 90-270: 0.25

Total Lumen Output: 1084 Lumens
Luminaire Efficacy: 50.9 lm/w
Maximum Candela: 13747 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	275.2	25.4%	60-65	4.8	0.4%	120-125	0	0.0%
5-10	423.3	39.0%	65-70	4.3	0.4%	125-130	0	0.0%
10-15	207.6	19.2%	70-75	3.5	0.3%	130-135	0	0.0%
15-20	75.3	6.9%	75-80	2.7	0.2%	135-140	0	0.0%
20-25	33.5	3.1%	80-85	1.7	0.2%	140-145	0	0.0%
25-30	15.9	1.5%	85-90	1.0	0.1%	145-150	0	0.0%
30-35	8.6	0.8%	90-95	0	0.0%	150-155	0	0.0%
35-40	6.2	0.6%	95-100	0	0.0%	155-160	0	0.0%
40-45	5.3	0.5%	100-105	0	0.0%	160-165	0	0.0%
45-50	5.0	0.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	5.0	0.5%	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	1046	96.5%
0-60	1066	98.3%
0-90	1084	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	13650	13650	13650	13650	13650	13650	13650	13650	13650	13650	13650	13650	13650	13650	13650
	5	9450	9393	9535	9646	9722	9646	9535	9393	9450	9393	9535	9646	9722	9646	9535
	10	3120	3206	3438	3588	3665	3588	3438	3206	3120	3206	3438	3588	3665	3588	3438
	15	674	748	873	899	899	899	873	748	674	748	873	899	899	899	873
	20	202	237	300	268	237	268	300	237	202	237	300	268	237	268	300
	25	70	84	129	99	85	99	129	84	70	84	129	99	85	99	129
	30	31	34	49	43	38	43	49	34	31	34	49	43	38	43	49
	35	18	20	24	24	22	24	24	20	18	20	24	24	22	24	24
	40	14	15	17	17	16	17	17	15	14	15	17	17	16	17	17
	45	12	13	14	14	14	14	14	13	12	13	14	14	14	14	14
	50	11	11	12	12	12	12	12	11	11	11	12	12	12	12	12
	55	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	60	9	10	10	10	10	10	10	9	10	10	10	10	10	10	10
	65	8	9	9	9	9	9	9	8	9	9	9	9	9	9	9
	70	7	8	7	8	8	8	7	8	7	8	7	8	8	8	7
	75	6	6	5	6	6	6	5	6	6	6	5	6	6	6	5
	80	4	4	4	5	4	5	4	4	4	4	5	4	5	4	4
	85	2	2	2	3	2	3	2	2	2	2	3	2	3	2	2
	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)

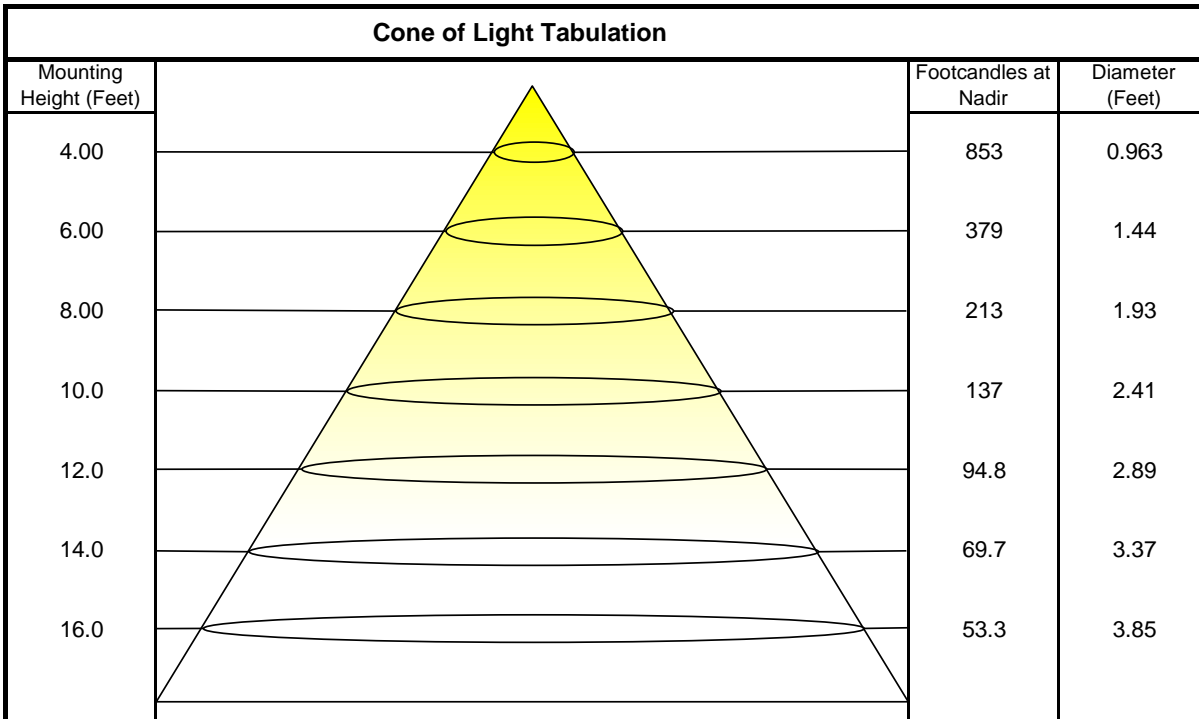
Vertical Angle (Degrees)	0	45	90
	0	3386000	3386000
	45	4058	4848
	55	4552	4820
	65	4844	5305
	75	5551	5263
	85	5851	5533



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	115	114	112	110	113	111	110	108	107	106	105	104	103	102	100	99	98	98
2	112	109	106	104	110	107	105	103	104	103	101	102	100	99	99	98	97	95
3	110	105	102	100	108	104	101	99	102	100	98	100	98	96	98	96	95	94
4	107	102	99	97	106	101	98	96	100	97	95	98	96	94	96	94	93	92
5	105	100	97	94	104	99	96	94	98	95	93	96	94	92	95	93	91	90
6	103	98	94	92	102	97	94	92	96	93	91	95	92	91	94	92	90	89
7	101	96	92	90	100	95	92	90	94	92	90	93	91	89	92	90	89	88
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87
9	98	93	89	87	97	92	89	87	91	89	87	91	88	87	90	88	86	86
10	96	91	88	86	96	91	88	86	90	88	86	90	87	86	89	87	85	85

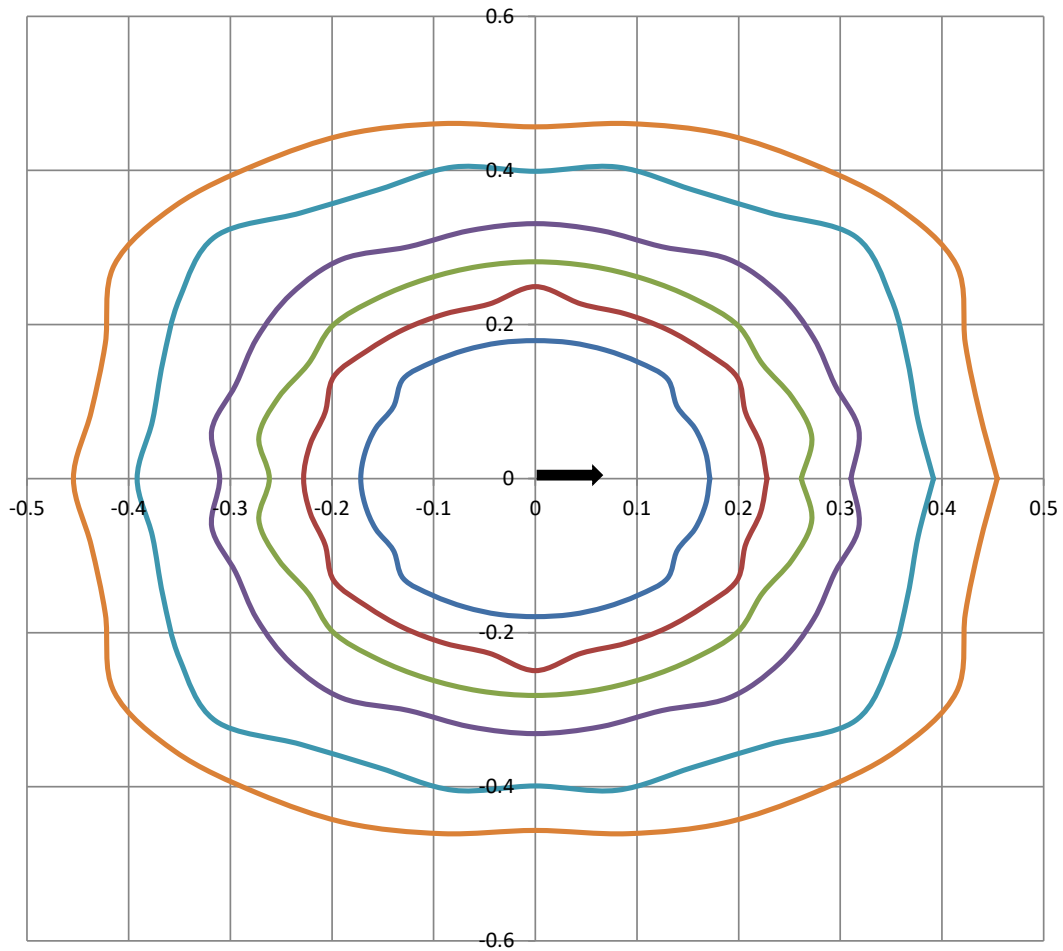
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	13650 Candela
Central Cone Intensity:	12124 Candela
Beam Flux:	458.6 Lumens
Beam Angle (0-180):	13.6 Degrees
Beam Angle (90-270):	14.3 Degrees
Field Angle (0-180):	25.4 Degrees
Field Angle (90-270):	27.1 Degrees





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