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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-RM-OF-WH-x-xx (0° TILT)
Order Number
13257190
Test Number
13257190.35

Test Date

2020-03-23

Prepared By

Jesse Litchfield, Technician

Approved By

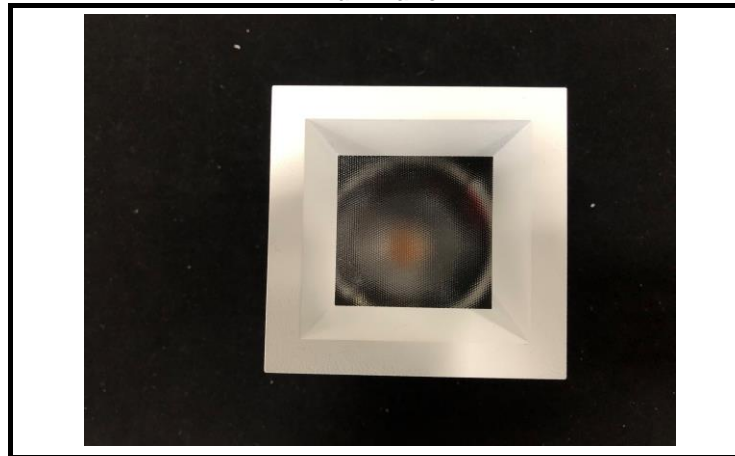
Alexa Lambert, Project Handler

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 Length: 2.50 in.
Luminous Width: 2.500 in.

Summary of Results

Total Luminaire Output:	871.2 Lumens
Luminaire Efficacy:	41 lm/w
Maximum Candela:	6805 Candela

Test Conditions

Test Temperature:	25.2 °C
Voltage:	120.0 VAC
Current:	0.1780 A
Power:	21.27 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

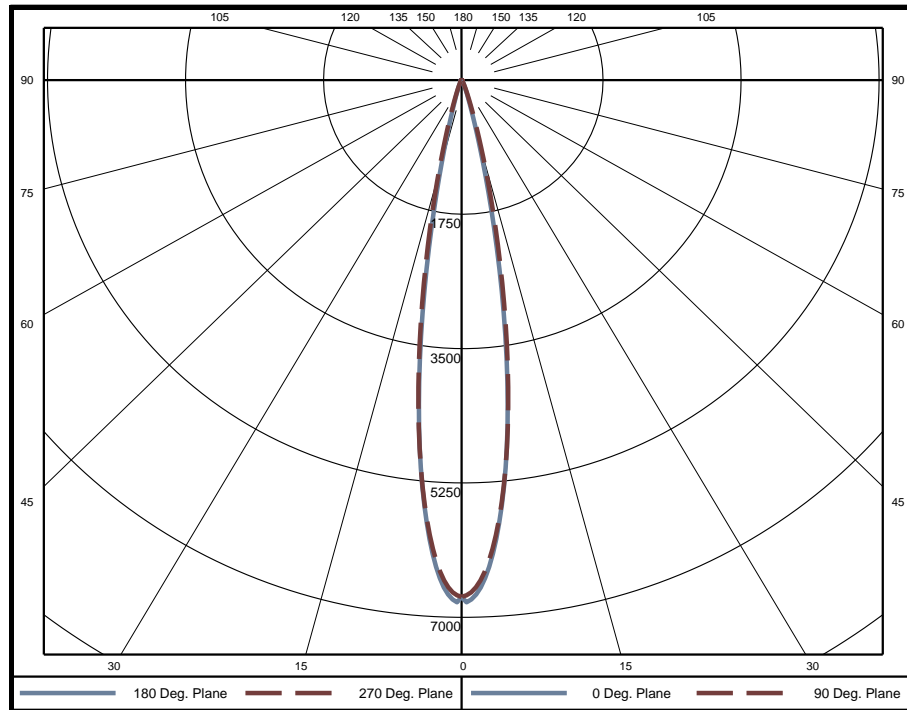
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.2 °C	120.0 VAC	0.1780 A	21.27 W	0.995	60 Hz	8.71 %

Summary of Results

Spacing Criteria
 0-180: 0.31
 90-270: 0.32

Total Lumen Output: 871.2 Lumens
Luminaire Efficacy: 41.0 lm/w
Maximum Candela: 6805 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	146.8	16.9%	60-65	5.8	0.7%	120-125	0	0.0%
5-10	301.7	34.6%	65-70	4.7	0.5%	125-130	0	0.0%
10-15	222.5	25.5%	70-75	3.0	0.3%	130-135	0	0.0%
15-20	93.8	10.8%	75-80	1.0	0.1%	135-140	0	0.0%
20-25	36.5	4.2%	80-85	0.4	0.0%	140-145	0	0.0%
25-30	16.2	1.9%	85-90	0.2	0.0%	145-150	0	0.0%
30-35	8.9	1.0%	90-95	0	0.0%	150-155	0	0.0%
35-40	6.7	0.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	5.8	0.7%	100-105	0	0.0%	160-165	0	0.0%
45-50	5.5	0.6%	105-110	0	0.0%	165-170	0	0.0%
50-55	5.7	0.7%	110-115	0	0.0%	170-175	0	0.0%
55-60	6.0	0.7%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	833	95.6%
0-60	856	98.3%
0-90	871	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	6735	6735	6735	6735	6735	6735	6735	6735	6735	6735	6735	6735	6735	6735	6735
	5	5564	5529	5578	5572	5537	5572	5578	5529	5564	5529	5578	5572	5537	5572	5578
	10	2786	2993	3262	3128	2952	3128	3262	2993	2786	2993	3262	3128	2952	3128	3262
	15	688	933	1301	1123	915	1123	1301	933	688	933	1301	1123	915	1123	1301
	20	181	244	419	312	235	312	419	244	181	244	419	312	235	312	419
	25	66	81	141	102	84	102	141	81	66	81	141	102	84	102	141
	30	32	34	51	42	39	42	51	34	32	34	51	42	39	42	51
	35	21	22	24	25	25	25	24	22	21	22	24	25	25	25	24
	40	16	17	18	18	18	18	18	17	16	17	18	18	18	18	18
	45	14	14	15	14	14	14	15	14	14	14	15	14	14	14	15
	50	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	55	14	13	13	13	13	13	13	14	13	13	13	13	13	13	13
	60	14	13	12	12	12	12	13	14	13	12	12	12	12	12	13
	65	12	12	10	11	11	11	12	12	12	10	11	11	11	10	12
	70	9	8	7	8	8	8	7	8	9	8	7	8	8	8	7
	75	4	4	3	4	4	4	3	4	4	3	4	4	4	4	3
	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	85	0	1	1	1	1	1	1	0	1	1	1	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)

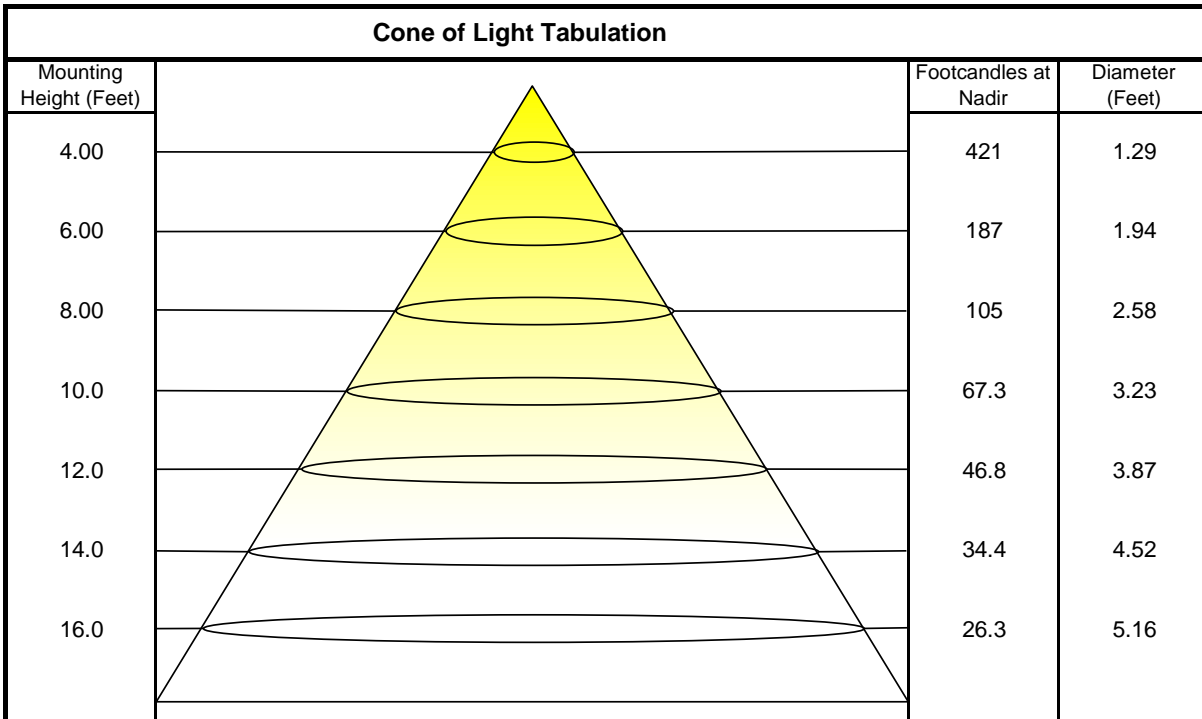
Vertical Angle (Degrees)	0	45	90
	0	1670000	1670000
	45	4826	5068
	55	5910	5529
	65	7086	6181
	75	3713	3390
	85	1339	1568



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	113	111	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92
4	106	101	97	94	104	100	96	94	98	95	93	96	93	91	94	92	91	89
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	92	90	88	87
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	86	86
7	98	93	89	86	97	92	88	86	91	88	86	90	87	85	89	87	85	84
8	96	90	87	84	95	90	86	84	89	86	84	88	85	83	87	85	83	82
9	94	88	85	82	94	88	85	82	87	84	82	87	84	82	86	84	82	81
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79

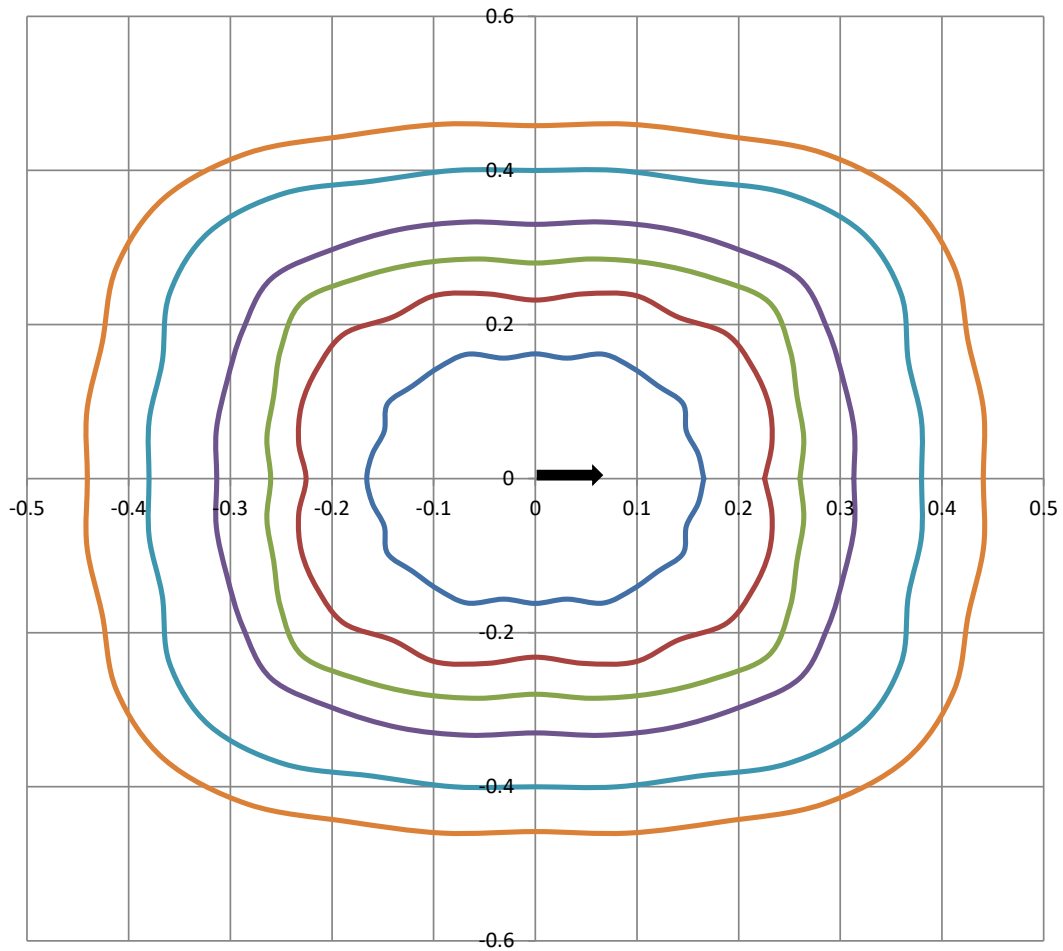
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	6735 Candela
Central Cone Intensity:	6310 Candela
Beam Flux:	414.1 Lumens
Beam Angle (0-180):	18.0 Degrees
Beam Angle (90-270):	18.5 Degrees
Field Angle (0-180):	30.1 Degrees
Field Angle (90-270):	32.2 Degrees





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