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7036 Snowdrift Road  
Allentown, PA 18106  
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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  
PO Box 837  
Carthage, MO 64836-0837  
United States

Catalog Number  
**2DR-L15/835-DIM-UNV-RM-OF-WH-x-xx**  
Order Number  
13257153  
Test Number  
13257153.07

Test Date

2020-03-10

Prepared By

Jesse Litchfield, Technician

Approved By

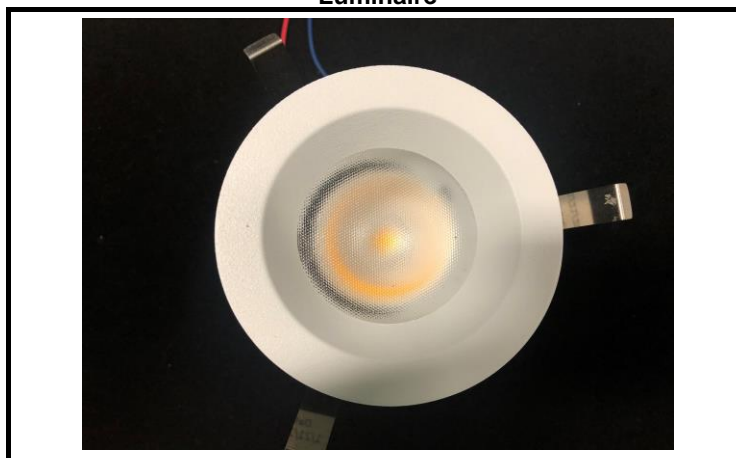
Alexa Lambert, Project Handler

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:	1550 Lumens
Luminaire Efficacy:	89.6 lm/w
Maximum Candela:	3925 Candela

**Test Conditions**

Test Temperature:	25.1 °C
Voltage:	120.1 VAC
Current:	0.1451 A
Power:	17.29 W
Power Factor:	0.992
Frequency:	60 Hz
Current THD:	11.0 %

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



## Distribution - Goniophotometer

### Distribution Test Conditions

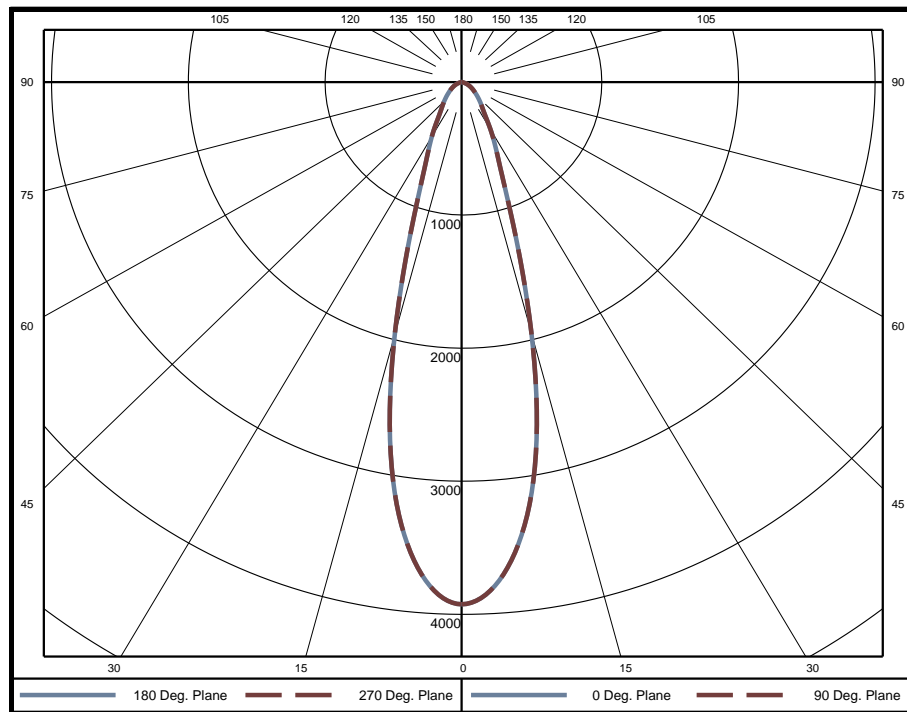
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.1 VAC	0.1451 A	17.29 W	0.992	60 Hz	11.0 %

### Summary of Results

**Spacing Criteria**  
 0-180: 0.49  
 90-270: 0.49

**Total Lumen Output:** 1550 Lumens  
**Luminaire Efficacy:** 89.6 lm/w  
**Maximum Candela:** 3925 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	90.7	5.9%	60-65	29.9	1.9%	120-125	0	0.0%
5-10	236.3	15.2%	65-70	21.1	1.4%	125-130	0	0.0%
10-15	280.2	18.1%	70-75	12.4	0.8%	130-135	0	0.0%
15-20	216.0	13.9%	75-80	5.5	0.4%	135-140	0	0.0%
20-25	151.3	9.8%	80-85	2.8	0.2%	140-145	0	0.0%
25-30	121.0	7.8%	85-90	0.8	0.1%	145-150	0	0.0%
30-35	94.2	6.1%	90-95	0	0.0%	150-155	0	0.0%
35-40	78.0	5.0%	95-100	0	0.0%	155-160	0	0.0%
40-45	67.3	4.3%	100-105	0	0.0%	160-165	0	0.0%
45-50	56.8	3.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	47.1	3.0%	110-115	0	0.0%	170-175	0	0.0%
55-60	38.5	2.5%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1268	81.8%
0-60	1477	95.3%
0-90	1550	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	3925	3925	3925	3925	3925	3925	3925	3925	3925	3925	3925	3925	3925	3925	3925
	5	3665	3665	3665	3665	3665	3665	3665	3665	3665	3665	3665	3665	3665	3665	3665
	10	2938	2938	2938	2938	2938	2938	2938	2938	2938	2938	2938	2938	2938	2938	2938
	15	1824	1824	1824	1824	1824	1824	1824	1824	1824	1824	1824	1824	1824	1824	1824
	20	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936
	25	578	578	578	578	578	578	578	578	578	578	578	578	578	578	578
	30	392	392	392	392	392	392	392	392	392	392	392	392	392	392	392
	35	267	267	267	267	267	267	267	267	267	267	267	267	267	267	267
	40	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206
	45	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
	50	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123
	55	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	60	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	65	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
	70	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
	75	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	80	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	85	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	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/m<sup>2</sup>)

Horizontal Angle (Degrees)

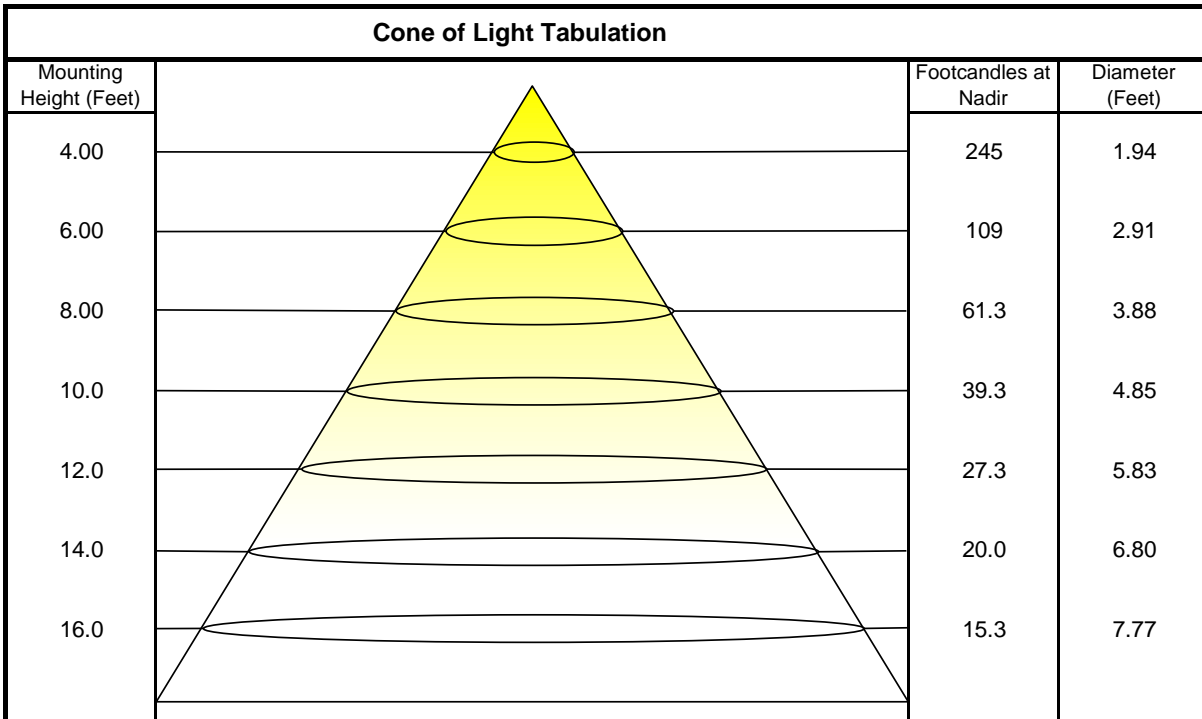
Vertical Angle (Degrees)	0	45	90
	0	1239000	1239000
	45	71460	71460
	55	52370	52370
	65	38330	38330
	75	18960	18960
	85	11210	11210



### 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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75
5	93	84	78	74	91	83	78	74	81	77	73	80	76	73	78	75	72	70
6	88	80	74	70	87	79	73	69	77	73	69	76	72	68	75	71	68	67
7	85	76	70	66	83	75	69	66	74	69	65	73	68	65	71	67	64	63
8	81	72	66	62	80	71	66	62	70	65	62	69	65	62	68	64	61	60
9	78	69	63	59	77	68	63	59	67	63	59	67	62	59	66	62	59	57
10	75	66	60	57	74	65	60	57	65	60	57	64	60	56	63	59	56	55

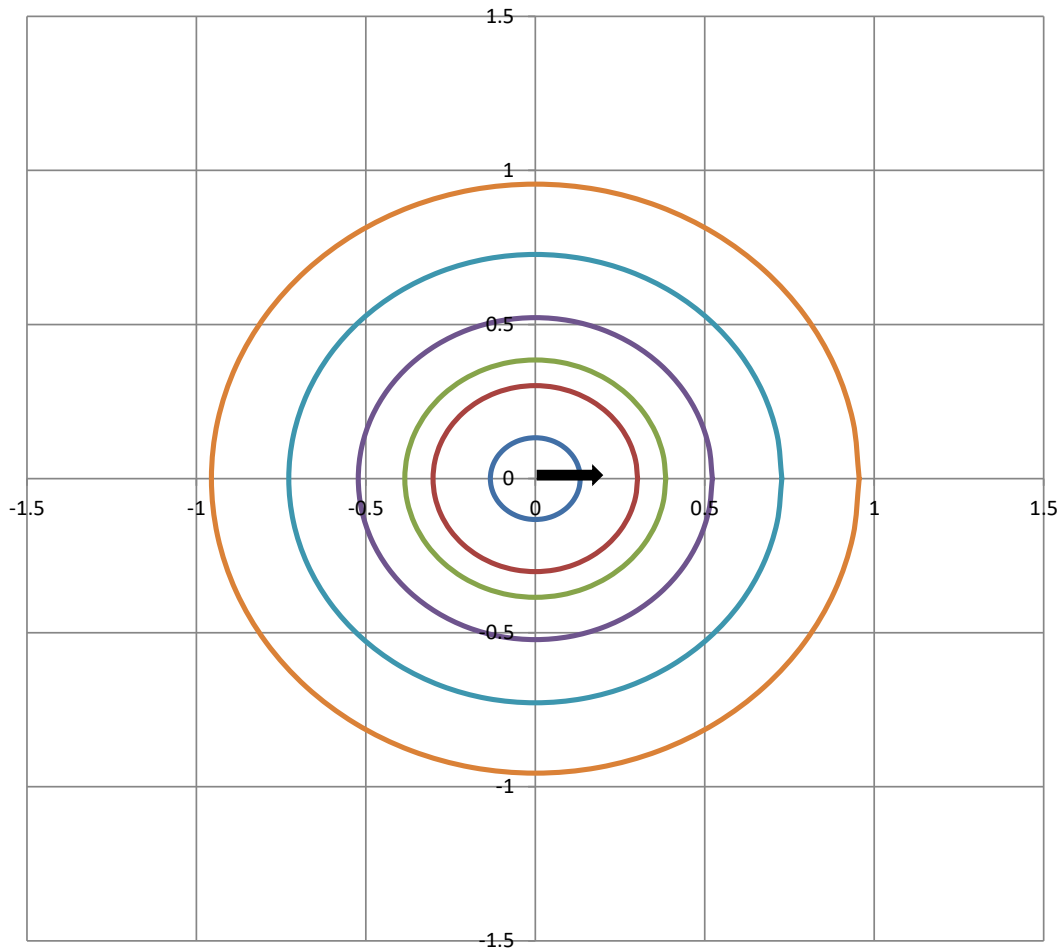
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	3925 Candela
Central Cone Intensity:	3832 Candela
Beam Flux:	572.5 Lumens
Beam Angle (0-180):	28.8 Degrees
Beam Angle (90-270):	28.8 Degrees
Field Angle (0-180):	59.9 Degrees
Field Angle (90-270):	59.9 Degrees





## 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