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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 C82.77-2002

**Prepared For**  
**H E Williams Inc**  
831 W Fairview Ave  
PO Box 837  
Carthage, MO 64836-0837  
United States

**Catalog Number**  
**6DR-L20/835-DIM-UNV-R-N-OF-WH**  
Order Number  
12326812  
Test Number  
12326812.15

Test Date

2018-06-06

Prepared By

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Approved By

Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Black formed aluminum housing, white reflector, clear plastic optic, clear glass patterned lens enclosure  
**Lamp:** One white LED  
**Mounting:** Recessed  
**Ballast/Driver:** Philips XI025C070V054DSM5

**Luminaire**



**Luminaire Characteristics**

Luminous Diameter: 5.75 in.

**Summary of Results**

Total Luminaire Output:	1812 Lumens
Luminaire Efficacy:	94.9 lm/w
Maximum Candela:	6729 Candela

**Test Conditions**

Test Temperature:	24.4 °C
Voltage:	120.0 VAC
Current:	0.1600 A
Power:	19.09 W
Power Factor:	0.994
Frequency:	60 Hz
Current THD:	9.67 %

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



## Distribution - Goniophotometer

### Distribution Test Conditions

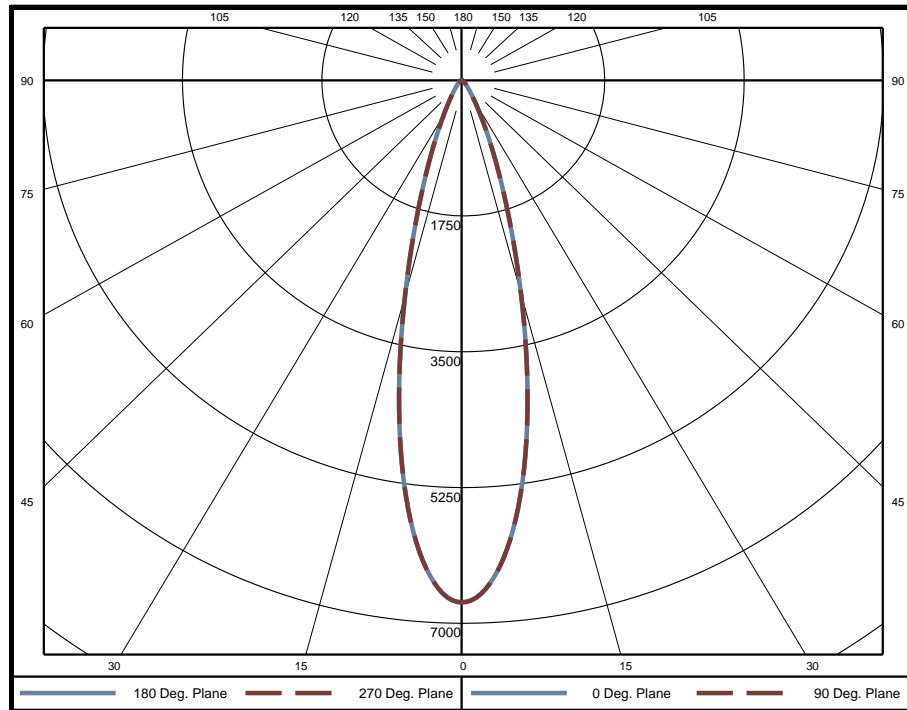
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.4 °C	120.0 VAC	0.1600 A	19.09 W	0.994	60 Hz	9.67 %

### Summary of Results

**Spacing Criteria**  
 0-180: 0.44  
 90-270: 0.44

**Total Lumen Output:** 1812 Lumens  
**Luminaire Efficacy:** 94.9 lm/w  
**Maximum Candela:** 6729 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	153.4	8.5%	60-65	11.1	0.6%	120-125	0	0.0%
5-10	377.7	20.8%	65-70	7.7	0.4%	125-130	0	0.0%
10-15	416.4	23.0%	70-75	5.0	0.3%	130-135	0	0.0%
15-20	316.5	17.5%	75-80	3.1	0.2%	135-140	0	0.0%
20-25	200.1	11.0%	80-85	1.7	0.1%	140-145	0	0.0%
25-30	116.2	6.4%	85-90	0.6	0.0%	145-150	0	0.0%
30-35	69.0	3.8%	90-95	0	0.0%	150-155	0	0.0%
35-40	44.5	2.5%	95-100	0	0.0%	155-160	0	0.0%
40-45	31.5	1.7%	100-105	0	0.0%	160-165	0	0.0%
45-50	24.0	1.3%	105-110	0	0.0%	165-170	0	0.0%
50-55	18.8	1.0%	110-115	0	0.0%	170-175	0	0.0%
55-60	14.9	0.8%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1694	93.5%
0-60	1783	98.4%
0-90	1812	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	6729	6729	6729	6729	6729	6729	6729	6729	6729	6729	6729	6729	6729	6729	6729
	5	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100	6100
	10	4509	4509	4509	4509	4509	4509	4509	4509	4509	4509	4509	4509	4509	4509	4509
	15	2662	2662	2662	2662	2662	2662	2662	2662	2662	2662	2662	2662	2662	2662	2662
	20	1358	1358	1358	1358	1358	1358	1358	1358	1358	1358	1358	1358	1358	1358	1358
	25	654	654	654	654	654	654	654	654	654	654	654	654	654	654	654
	30	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319
	35	172	172	172	172	172	172	172	172	172	172	172	172	172	172	172
	40	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104
	45	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	55	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
	60	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
	65	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	70	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	75	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	80	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	85	2	2	2	2	2	2	2	2	2	2	2	2	2	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/m<sup>2</sup>)

Horizontal Angle (Degrees)

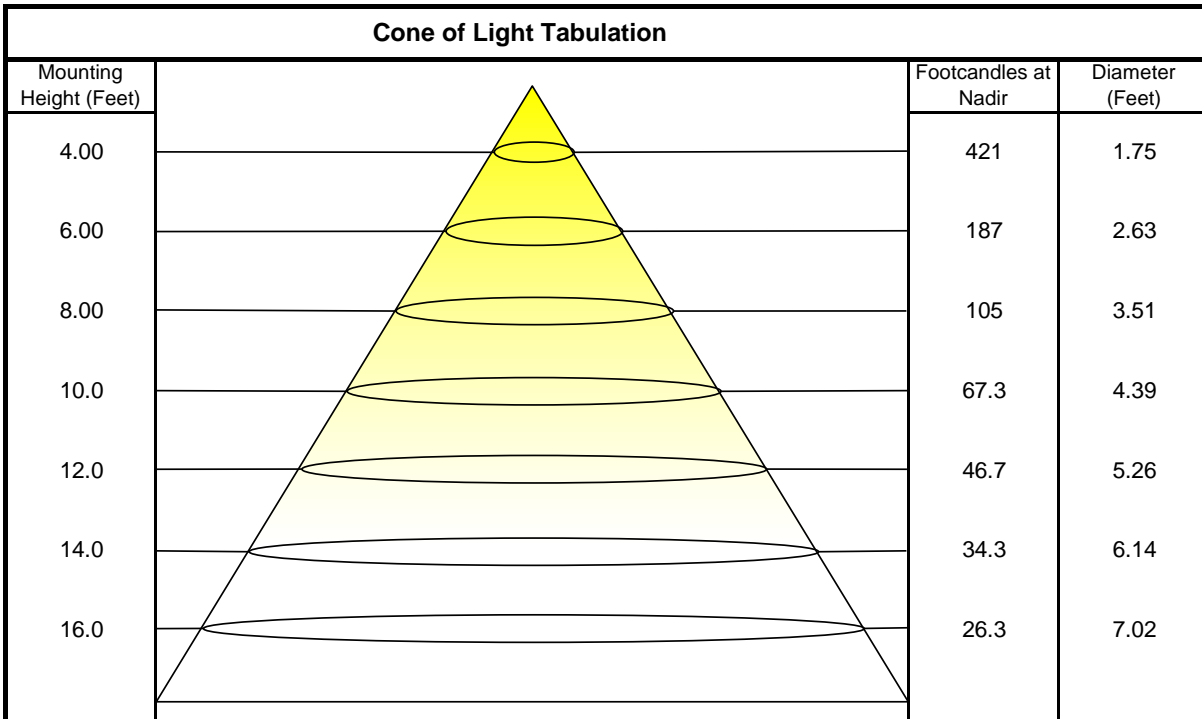
Vertical Angle (Degrees)	0	45	90
	0	401600	401600
	45	5933	5933
	55	3880	3880
	65	2644	2644
	75	1703	1703
	85	1386	1386



### 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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	102	100	108	104	101	98	101	98	96	98	96	94	95	94	92	91
3	106	100	96	93	104	99	95	92	97	93	91	94	92	89	92	90	88	87
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83
5	98	91	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80
6	95	88	83	80	94	87	83	79	86	82	79	84	81	78	83	80	78	77
7	92	84	80	76	91	84	79	76	83	79	76	82	78	75	80	77	75	74
8	89	81	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71
9	86	78	74	71	85	78	74	71	77	73	70	76	73	70	76	72	70	69
10	83	76	71	68	83	76	71	68	75	71	68	74	71	68	73	70	68	67

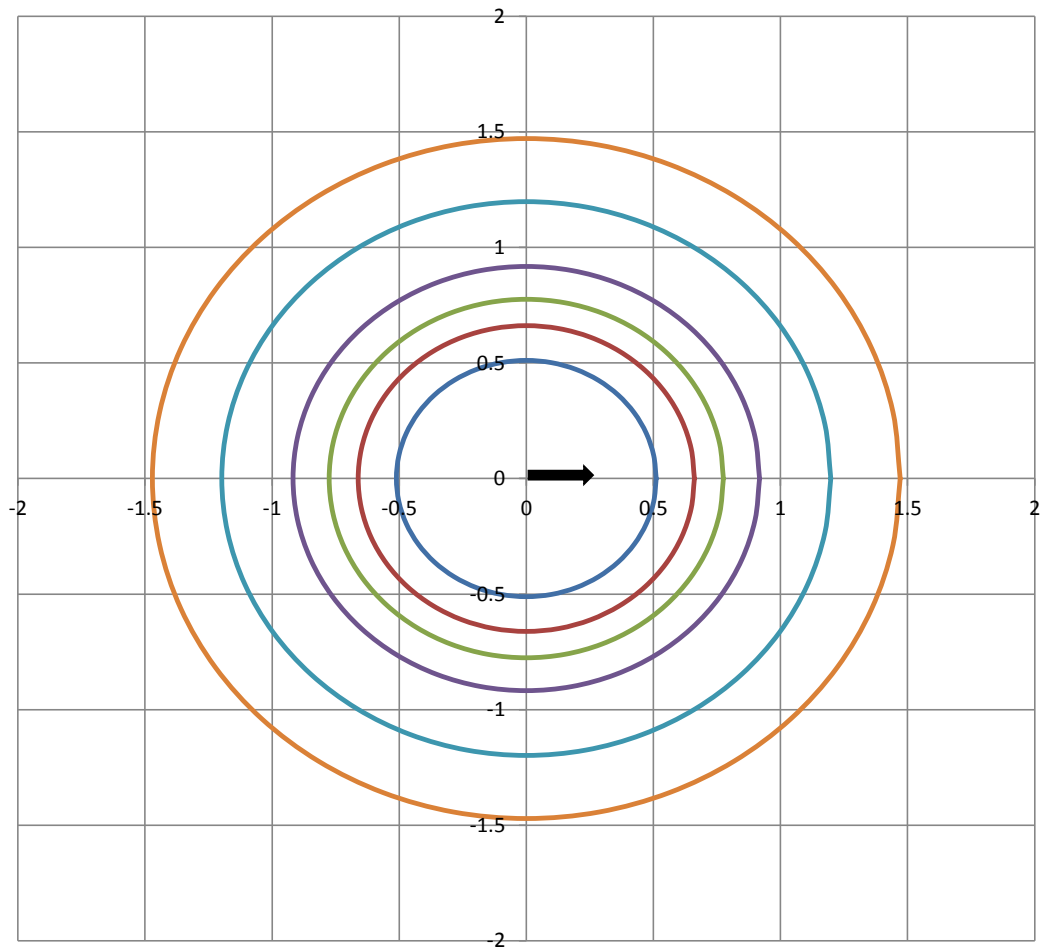
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	6729 Candela
Central Cone Intensity:	6505 Candela
Beam Flux:	791.5 Lumens
Beam Angle (0-180):	26.1 Degrees
Beam Angle (90-270):	26.1 Degrees
Field Angle (0-180):	49.6 Degrees
Field Angle (90-270):	49.6 Degrees





## ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

5 fc    2 fc    1 fc    0.5 fc    0.2 fc    0.1 fc