



UL Verification Services Inc.  
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  
**2DS-L15/835-DIM-UNV-ON-OF-CS-x-xx**  
Order Number  
13257153  
Test Number  
13257153.21

Test Date

2020-03-12

Prepared By

Jesse Litchfield, Technician

Approved By

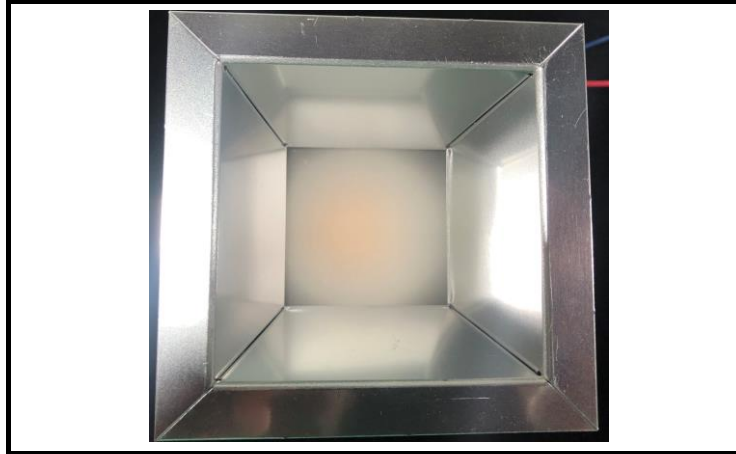
Alexa Lambert, Project Handler

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: 1133 Lumens  
Luminaire Efficacy: 65.5 lm/w  
Maximum Candela: 1435 Candela

**Test Conditions**

Test Temperature: 25.0 °C  
Voltage: 120.1 VAC  
Current: 0.1452 A  
Power: 17.30 W  
Power Factor: 0.992  
Frequency: 60 Hz  
Current THD: 10.8 %

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



## Distribution - Goniophotometer

### Distribution Test Conditions

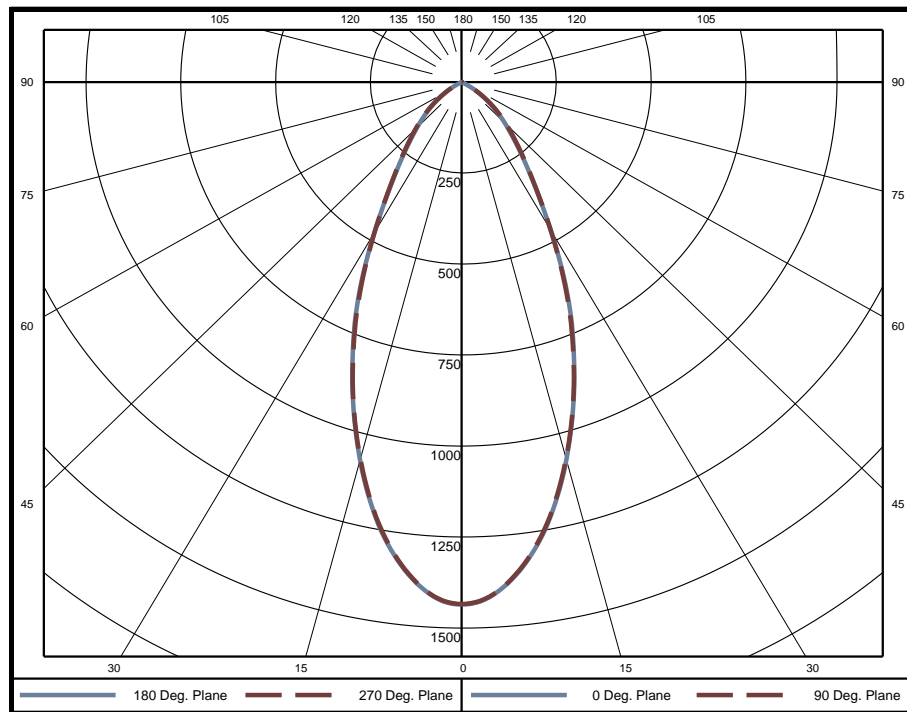
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	120.1 VAC	0.1452 A	17.30 W	0.992	60 Hz	10.8 %

### Summary of Results

**Spacing Criteria**  
 0-180: 0.73  
 90-270: 0.73

**Total Lumen Output:** 1133 Lumens  
**Luminaire Efficacy:** 65.5 lm/w  
**Maximum Candela:** 1435 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	33.7	3.0%	60-65	8.7	0.8%	120-125	0	0.0%
5-10	94.1	8.3%	65-70	1.1	0.1%	125-130	0	0.0%
10-15	137.5	12.1%	70-75	0.3	0.0%	130-135	0	0.0%
15-20	159.4	14.1%	75-80	0.2	0.0%	135-140	0	0.0%
20-25	160.8	14.2%	80-85	0.1	0.0%	140-145	0	0.0%
25-30	144.2	12.7%	85-90	0.0	0.0%	145-150	0	0.0%
30-35	116.9	10.3%	90-95	0	0.0%	150-155	0	0.0%
35-40	90.7	8.0%	95-100	0	0.0%	155-160	0	0.0%
40-45	69.7	6.2%	100-105	0	0.0%	160-165	0	0.0%
45-50	53.4	4.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	38.5	3.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	23.7	2.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	937	82.7%
0-60	1123	99.1%
0-90	1133	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	1434	1434	1434	1434	1434	1434	1434	1434	1434	1434	1434	1434	1434	1434	1434
	5	1383	1383	1382	1381	1382	1381	1382	1383	1383	1382	1381	1382	1381	1382	1383
	10	1252	1254	1253	1250	1249	1250	1253	1254	1252	1254	1253	1250	1249	1250	1253
	15	1067	1072	1078	1070	1064	1070	1078	1072	1067	1072	1078	1070	1064	1070	1078
	20	865	873	877	871	862	871	877	873	865	873	877	871	862	871	877
	25	665	674	675	669	658	669	675	674	665	674	675	669	658	669	675
	30	466	480	492	478	465	478	492	480	466	480	492	478	465	478	492
	35	319	324	339	326	323	326	339	324	319	324	339	326	323	326	339
	40	226	222	223	226	232	226	223	222	226	222	223	226	232	226	223
	45	162	155	149	160	169	160	149	155	162	155	149	160	169	160	149
	50	113	107	104	112	116	112	104	107	113	107	104	112	116	112	104
	55	66	69	69	72	69	72	69	69	66	69	69	72	69	72	69
	60	28	35	37	37	27	37	37	35	28	35	37	37	27	37	35
	65	2	4	11	5	2	5	11	4	2	4	11	5	2	5	11
	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	75	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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/m<sup>2</sup>)

Horizontal Angle (Degrees)

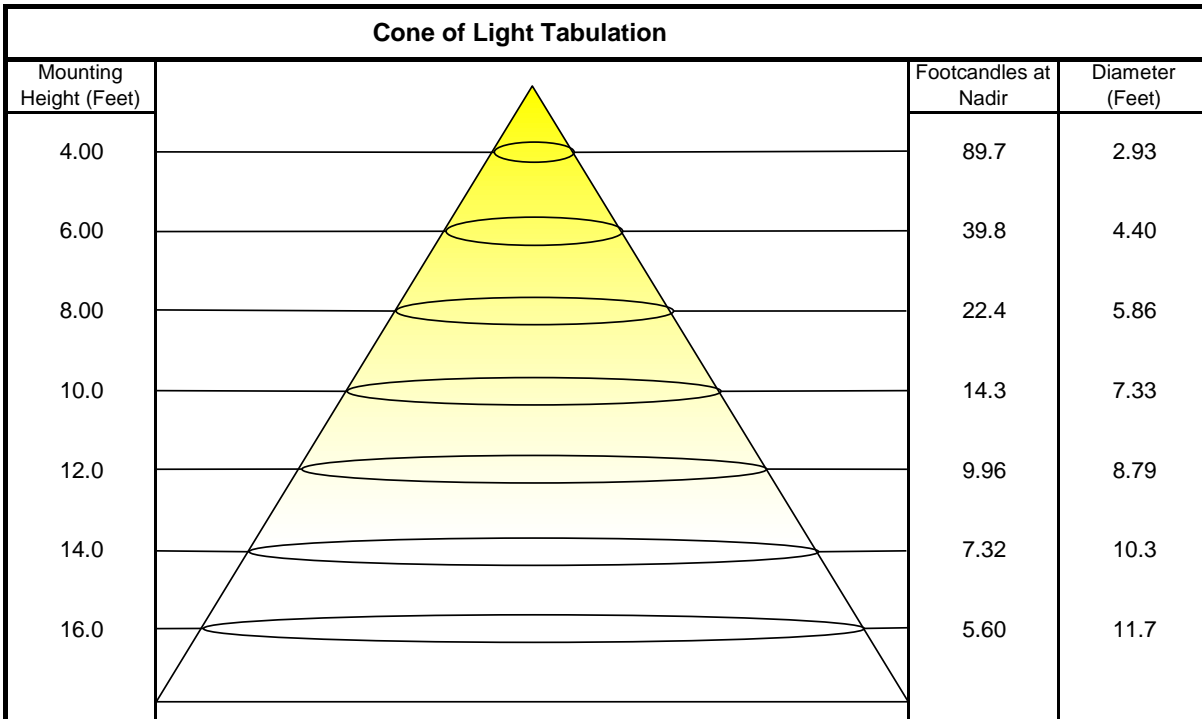
Vertical Angle (Degrees)	0	45	90
	0	355700	355700
	45	56880	59160
	55	28730	29710
	65	958	1014
	75	451	480
	85	299	330



### 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	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	73
5	90	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67
6	86	76	70	65	84	75	69	65	74	69	65	72	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	63	57	53	62	56	53	61	56	52	60	56	52	51
10	70	60	54	50	69	59	54	50	59	53	50	58	53	49	57	52	49	48

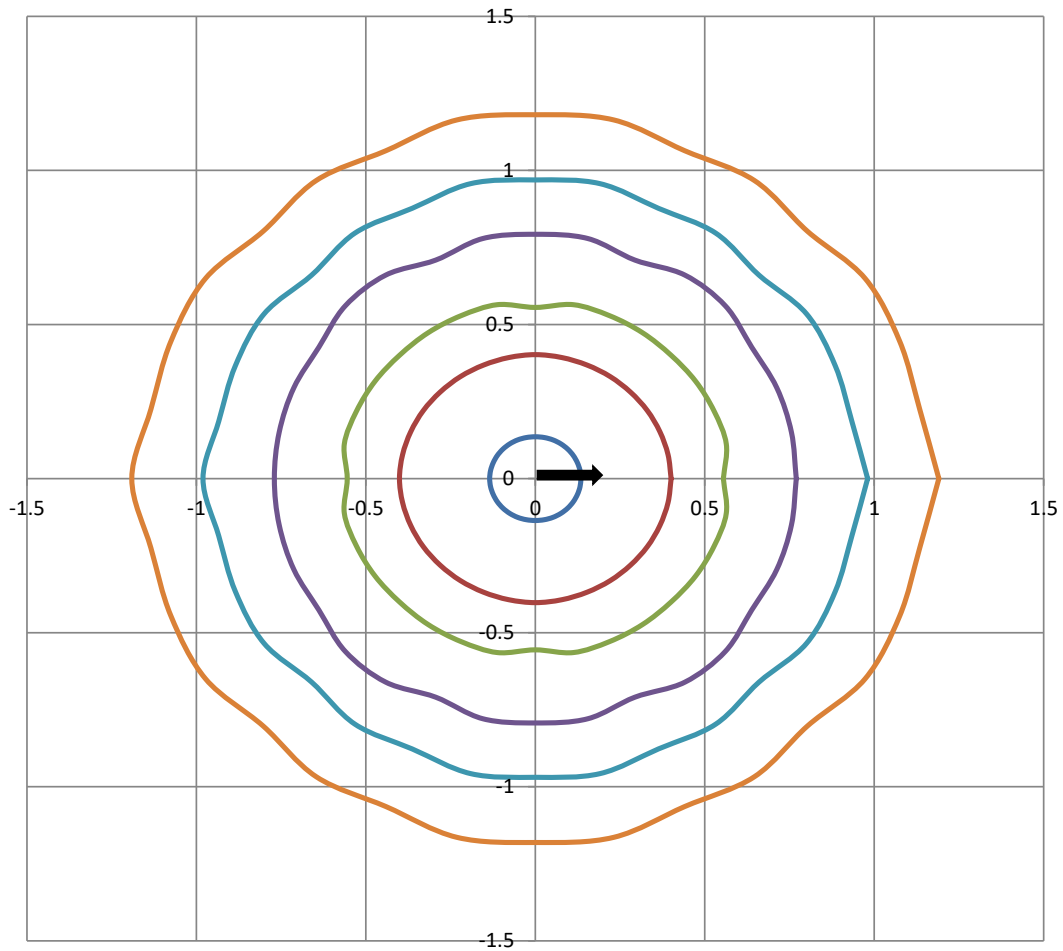
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1434 Candela
Central Cone Intensity:	1416 Candela
Beam Flux:	549.2 Lumens
Beam Angle (0-180):	47.4 Degrees
Beam Angle (90-270):	47.1 Degrees
Field Angle (0-180):	93.6 Degrees
Field Angle (90-270):	94.7 Degrees





## ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

20 fc    10 fc    5 fc    2 fc    1 fc    0.5 fc