



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



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-LW-OF-WH-x-xx
Order Number
13257153
Test Number
13257153.14

Test Date

2020-03-11

Prepared By

Jesse Litchfield, Technician

Approved By

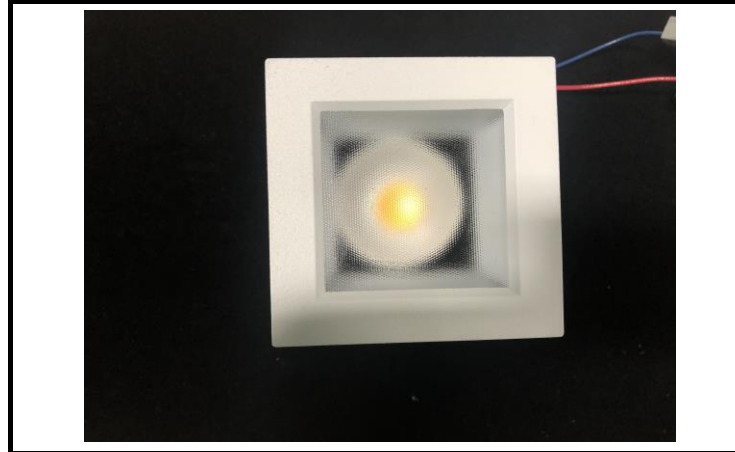
Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



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:	1602 Lumens
Luminaire Efficacy:	92.5 lm/w
Maximum Candela:	1890 Candela

Test Conditions

Test Temperature:	25.2 °C
Voltage:	120.1 VAC
Current:	0.1454 A
Power:	17.32 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

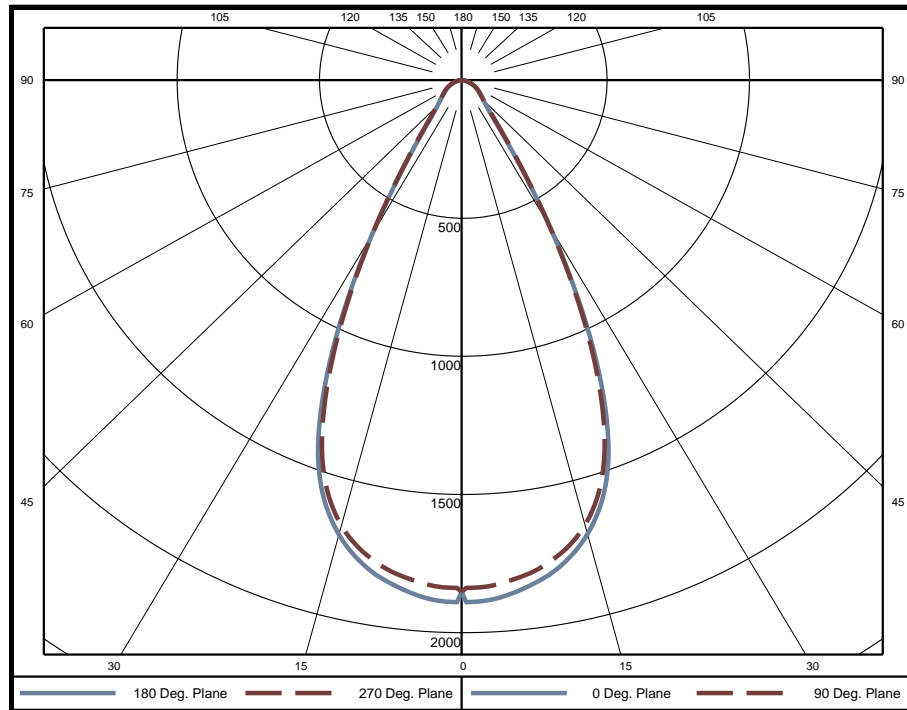
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.2 °C	120.1 VAC	0.1454 A	17.32 W	0.992	60 Hz	10.8 %

Summary of Results

Spacing Criteria
 0-180: 0.87
 90-270: 0.86

Total Lumen Output: 1602 Lumens
Luminaire Efficacy: 92.5 lm/w
Maximum Candela: 1890 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	44.1	2.8%	60-65	26.3	1.6%	120-125	0	0.0%
5-10	129.1	8.1%	65-70	20.5	1.3%	125-130	0	0.0%
10-15	204.7	12.8%	70-75	14.7	0.9%	130-135	0	0.0%
15-20	259.0	16.2%	75-80	9.2	0.6%	135-140	0	0.0%
20-25	271.7	17.0%	80-85	4.4	0.3%	140-145	0	0.0%
25-30	224.9	14.0%	85-90	0.8	0.0%	145-150	0	0.0%
30-35	144.3	9.0%	90-95	0	0.0%	150-155	0	0.0%
35-40	82.7	5.2%	95-100	0	0.0%	155-160	0	0.0%
40-45	54.2	3.4%	100-105	0	0.0%	160-165	0	0.0%
45-50	42.8	2.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	36.5	2.3%	110-115	0	0.0%	170-175	0	0.0%
55-60	31.5	2.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1361	84.9%
0-60	1526	95.2%
0-90	1601	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	1852	1852	1852	1852	1852	1852	1852	1852	1852	1852	1852	1852	1852	1852	1852
	5	1869	1842	1827	1822	1820	1822	1827	1842	1869	1842	1827	1822	1820	1822	1827
	10	1807	1781	1771	1768	1767	1768	1771	1781	1807	1781	1771	1768	1767	1768	1771
	15	1690	1670	1667	1663	1657	1663	1667	1670	1690	1670	1667	1663	1657	1663	1667
	20	1471	1467	1475	1461	1434	1461	1475	1467	1471	1467	1475	1461	1434	1461	1475
	25	1065	1114	1176	1111	1038	1111	1176	1114	1065	1114	1176	1111	1038	1111	1176
	30	585	668	778	676	588	676	778	668	585	668	778	676	588	676	778
	35	269	328	419	343	282	343	419	328	269	328	419	343	282	343	419
	40	150	174	217	183	157	183	217	174	150	174	217	183	157	183	217
	45	109	119	134	123	111	123	134	119	109	119	134	123	111	123	134
	50	87	93	99	94	88	94	99	93	87	93	99	94	88	94	99
	55	72	76	77	77	73	77	77	76	72	76	77	77	73	77	77
	60	59	61	61	62	60	62	61	61	59	61	61	62	60	62	61
	65	46	48	47	48	47	48	47	48	46	48	47	48	47	48	47
	70	34	34	34	35	34	35	34	34	34	34	34	35	34	35	34
	75	22	23	22	23	23	23	22	23	22	23	22	23	23	23	22
	80	12	12	12	13	13	13	12	12	12	12	12	13	13	13	12
	85	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4
	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)

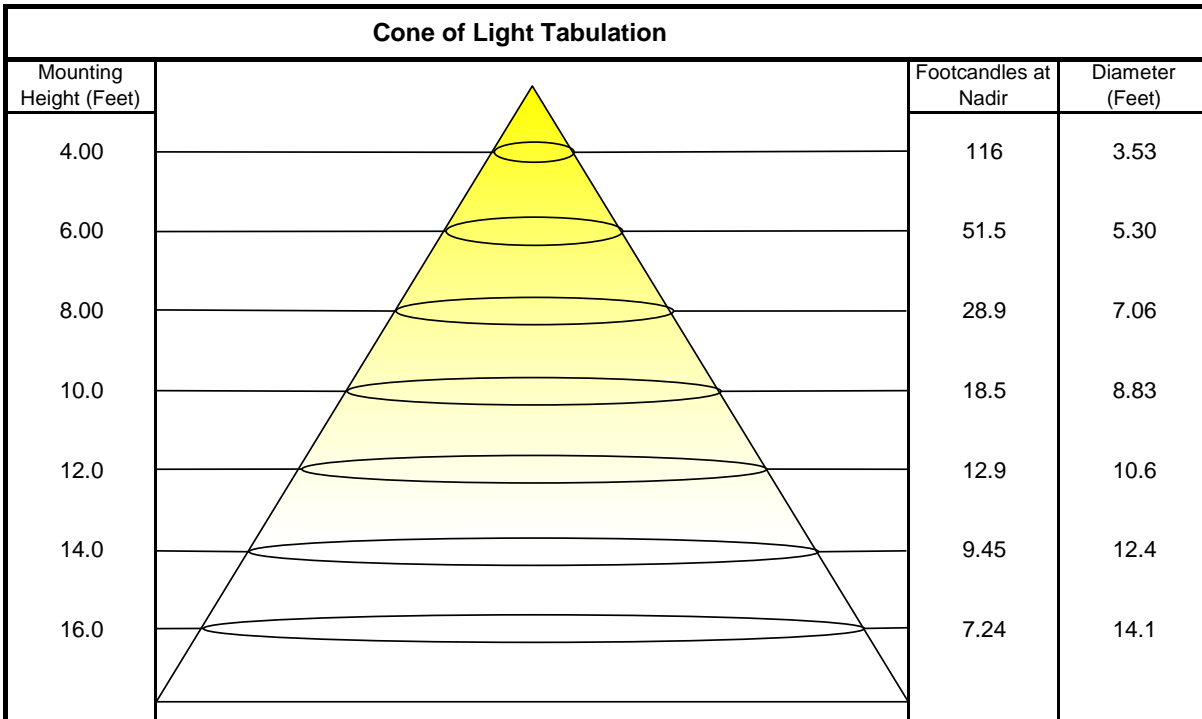
Vertical Angle (Degrees)	0	45	90
	0	459400	459400
	45	38250	47090
	55	30950	33490
	65	27060	27480
	75	21280	20910
	85	12820	11050



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	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78
4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72
5	91	82	76	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67
6	86	77	70	66	85	76	70	66	74	69	65	73	68	65	72	68	64	63
7	82	72	66	62	80	71	66	61	70	65	61	69	64	61	68	64	60	59
8	78	68	62	58	77	67	62	58	66	61	57	65	61	57	64	60	57	55
9	74	64	58	54	73	64	58	54	63	58	54	62	57	54	61	57	54	52
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	49

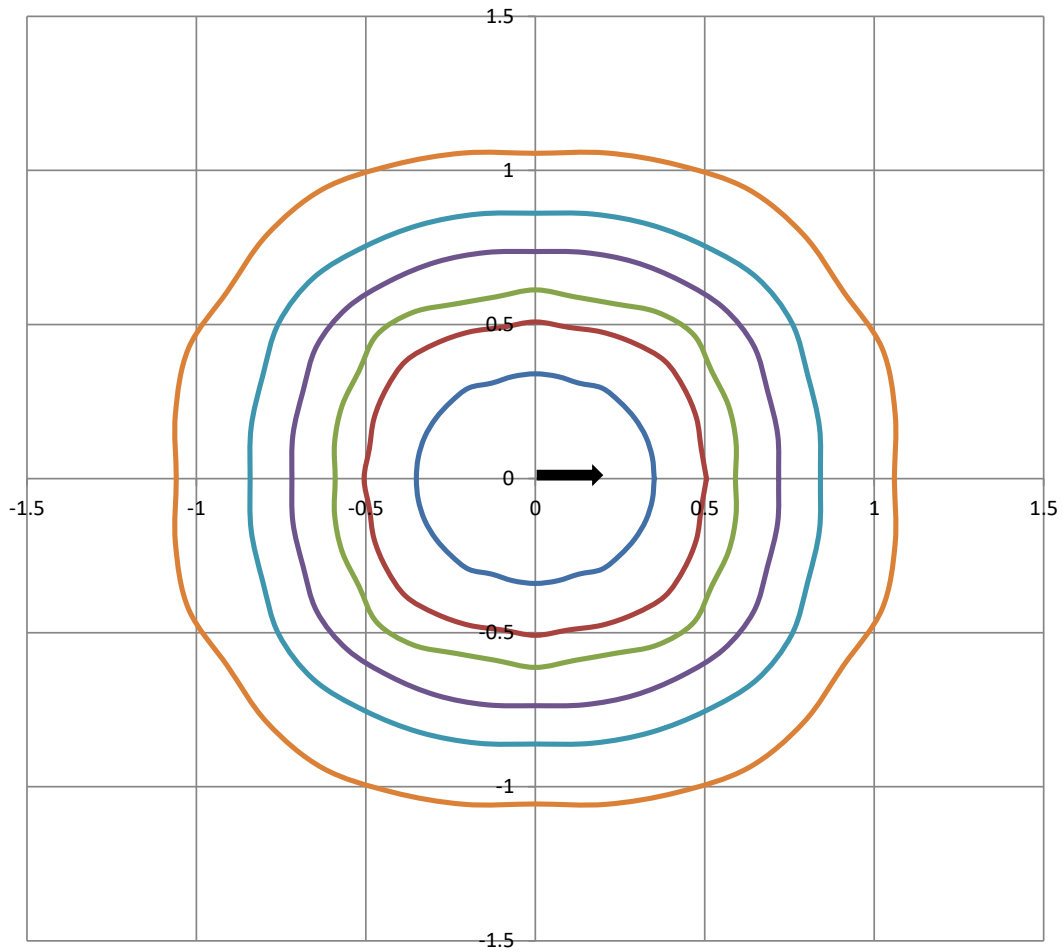
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1852 Candela
Central Cone Intensity:	1847 Candela
Beam Flux:	1018.8 Lumens
Beam Angle (0-180):	52.8 Degrees
Beam Angle (90-270):	52.4 Degrees
Field Angle (0-180):	75.7 Degrees
Field Angle (90-270):	76.7 Degrees





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