



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



Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
H E Williams Inc

831 W Fairview Ave
PO Box 837
Carthage, MO 64836-0837
United States

Catalog Number
6DR-L50/835-DIM-UNV-O-N-OF-CS

Order Number
12326812
Test Number
12326812.28

Test Date

2018-06-07

Prepared By

Josh Mitchell, 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: Black formed aluminum housing, specular reflector, clear plastic lens enclosure
Lamp: One white LED
Mounting: Recessed
Ballast/Driver: Philips XI050C140V054DSM5

Luminaire



Luminaire Characteristics

Luminous Diameter: 6.00 in.

Summary of Results

Total Luminaire Output:	6083 Lumens
Luminaire Efficacy:	112.6 lm/w
Maximum Candela:	42370 Candela

Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.0 VAC
Current:	0.4507 A
Power:	54.00 W
Power Factor:	0.998
Frequency:	60 Hz
Current THD:	4.39 %

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	120.0 VAC	0.4507 A	54.00 W	0.998	60 Hz	4.39 %

Summary of Results

Spacing Criteria

0-180: 0.24

90-270: 0.24

Total Lumen Output:

6083 Lumens

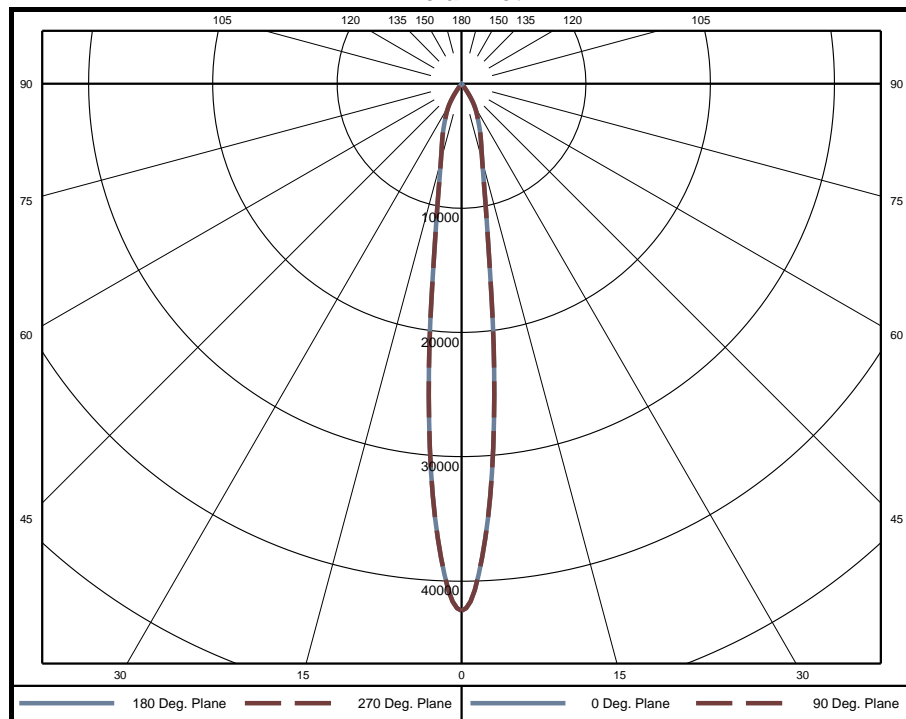
Luminaire Efficacy:

112.6 lm/w

Maximum Candela:

42370 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	843	13.9%	60-65	2	0.0%	120-125	0	0.0%
5-10	1340	22.0%	65-70	1	0.0%	125-130	0	0.0%
10-15	1008	16.6%	70-75	1	0.0%	130-135	0	0.0%
15-20	874	14.4%	75-80	0	0.0%	135-140	0	0.0%
20-25	782	12.9%	80-85	0	0.0%	140-145	0	0.0%
25-30	653	10.7%	85-90	0	0.0%	145-150	0	0.0%
30-35	425	7.0%	90-95	0	0.0%	150-155	0	0.0%
35-40	110	1.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	19	0.3%	100-105	0	0.0%	160-165	0	0.0%
45-50	12	0.2%	105-110	0	0.0%	165-170	0	0.0%
50-55	7	0.1%	110-115	0	0.0%	170-175	0	0.0%
55-60	4	0.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	6035	99.2%
0-60	6077	99.9%
0-90	6081	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	42370	42370	42370	42370	42370	42370	42370	42370	42370	42370	42370	42370	42370	42370	42370	42370
5	29340	29340	29340	29340	29340	29340	29340	29340	29340	29340	29340	29340	29340	29340	29340	29340
10	11980	11980	11980	11980	11980	11980	11980	11980	11980	11980	11980	11980	11980	11980	11980	11980
15	6443	6443	6443	6443	6443	6443	6443	6443	6443	6443	6443	6443	6443	6443	6443	6443
20	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473
25	3098	3098	3098	3098	3098	3098	3098	3098	3098	3098	3098	3098	3098	3098	3098	3098
30	2085	2085	2085	2085	2085	2085	2085	2085	2085	2085	2085	2085	2085	2085	2085	2085
35	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790
40	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
45	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
50	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
55	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
60	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
65	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
70	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
75	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
85	0	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	0
95	0	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	0
105	0	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	0
115	0	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	0
125	0	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	0
135	0	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	0
145	0	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	0
155	0	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	0
165	0	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	0
175	0	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	0

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)

	0	45	90
0	2323000	2323000	2323000
45	3065	3065	3065
55	1123	1123	1123
65	474	474	474
75	225	225	225
85	179	179	179



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	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92
3	107	102	98	95	105	101	97	94	98	95	93	96	94	92	94	92	90	89
4	103	98	93	90	102	97	93	90	95	91	89	93	90	88	91	89	87	86
5	100	94	89	86	99	93	89	86	91	88	85	90	87	84	88	86	84	82
6	97	90	86	82	95	89	85	82	88	84	82	87	84	81	86	83	81	80
7	94	87	82	79	93	86	82	79	85	81	79	84	81	78	83	80	78	77
8	91	84	79	76	90	83	79	76	82	79	76	82	78	76	81	78	75	74
9	88	81	77	74	87	81	77	74	80	76	74	79	76	73	78	75	73	72
10	86	79	74	72	85	78	74	71	78	74	71	77	74	71	76	73	71	70

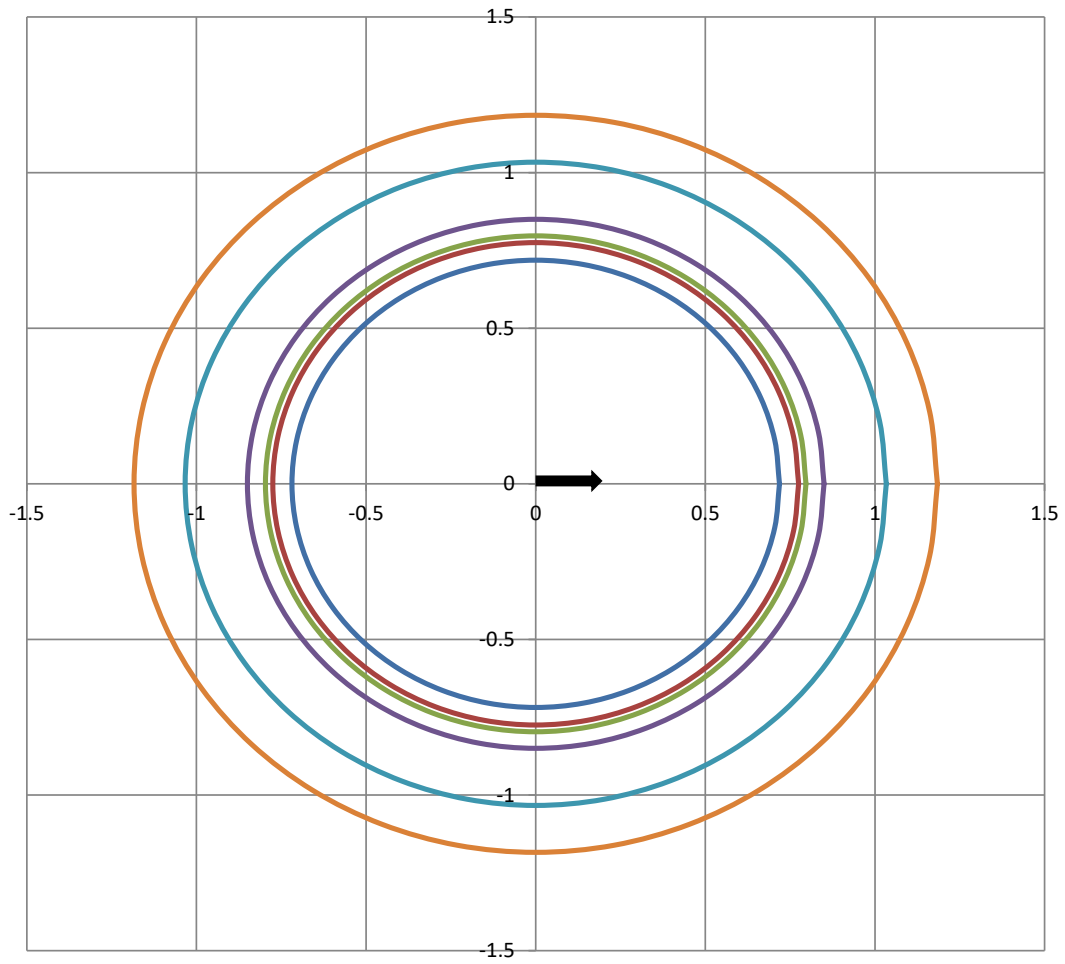
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	42370 Candela
Central Cone Intensity:	37264 Candela
Beam Flux:	1428.2 Lumens
Beam Angle (0-180):	14.0 Degrees
Beam Angle (90-270):	14.0 Degrees
Field Angle (0-180):	41.6 Degrees
Field Angle (90-270):	41.6 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		2650	0.968
6.00		1180	1.45
8.00		662	1.94
10.0		424	2.42
12.0		294	2.90
14.0		216	3.39
16.0		166	3.87



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

