



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-M-OF-CS

Order Number
12326812
Test Number
12326812.27

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:	5948 Lumens
Luminaire Efficacy:	110.2 lm/w
Maximum Candela:	12368 Candela

Test Conditions

Test Temperature:	25.3 °C
Voltage:	120.0 VAC
Current:	0.4506 A
Power:	53.99 W
Power Factor:	0.998
Frequency:	60 Hz
Current THD:	4.40 %

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



Distribution - Goniophotometer

Distribution Test Conditions

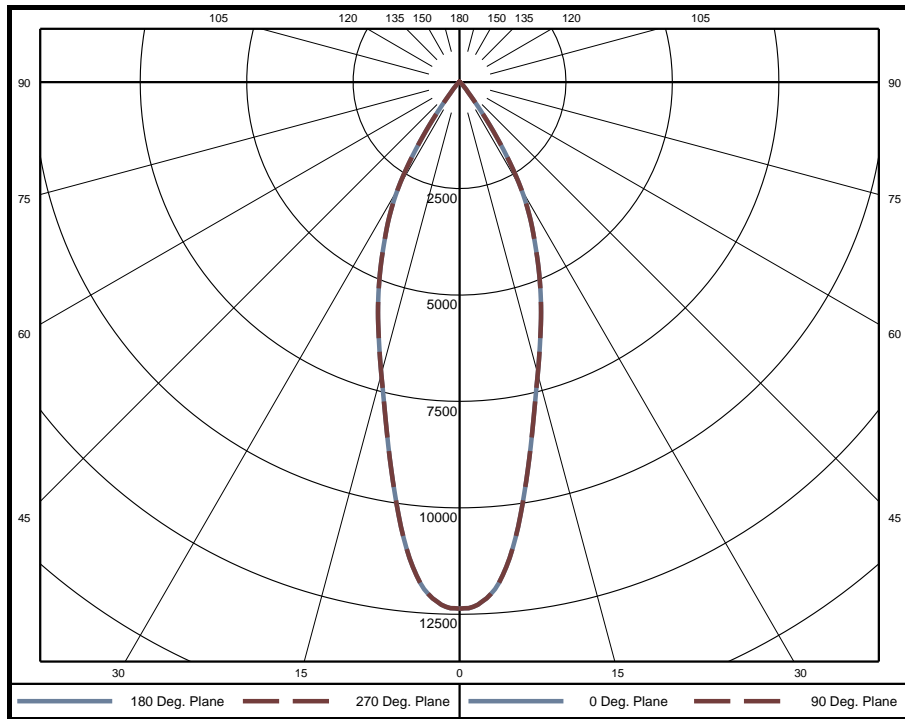
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.3 °C	120.0 VAC	0.4506 A	53.99 W	0.998	60 Hz	4.40 %

Summary of Results

Spacing Criteria
 0-180: 0.56
 90-270: 0.56

Total Lumen Output: 5948 Lumens
Luminaire Efficacy: 110.2 lm/w
Maximum Candela: 12368 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	288	4.8%	60-65	9	0.2%	120-125	0	0.0%
5-10	742	12.5%	65-70	5	0.1%	125-130	0	0.0%
10-15	951	16.0%	70-75	3	0.1%	130-135	0	0.0%
15-20	1036	17.4%	75-80	2	0.0%	135-140	0	0.0%
20-25	1021	17.2%	80-85	1	0.0%	140-145	0	0.0%
25-30	898	15.1%	85-90	1	0.0%	145-150	0	0.0%
30-35	603	10.1%	90-95	0	0.0%	150-155	0	0.0%
35-40	225	3.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	81	1.4%	100-105	0	0.0%	160-165	0	0.0%
45-50	43	0.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	26	0.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	15	0.3%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	5764	96.9%
0-60	5929	99.7%
0-90	5950	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	12370	12370	12370	12370	12370	12370	12370	12370	12370	12370	12370	12370	12370	12370	12370	12370
5	11620	11620	11620	11620	11620	11620	11620	11620	11620	11620	11620	11620	11620	11620	11620	11620
10	9235	9235	9235	9235	9235	9235	9235	9235	9235	9235	9235	9235	9235	9235	9235	9235
15	7095	7095	7095	7095	7095	7095	7095	7095	7095	7095	7095	7095	7095	7095	7095	7095
20	5591	5591	5591	5591	5591	5591	5591	5591	5591	5591	5591	5591	5591	5591	5591	5591
25	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198	4198
30	2889	2889	2889	2889	2889	2889	2889	2889	2889	2889	2889	2889	2889	2889	2889	2889
35	1248	1248	1248	1248	1248	1248	1248	1248	1248	1248	1248	1248	1248	1248	1248	1248
40	321	321	321	321	321	321	321	321	321	321	321	321	321	321	321	321
45	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142
50	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
55	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
60	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
65	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
70	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
75	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
80	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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	678000	678000	678000
45	11010	11010	11010
55	4121	4121	4121
65	1670	1670	1670
75	895	895	895
85	734	734	734



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	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75
6	92	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71
7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	75	72	69	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	65	63	61
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59

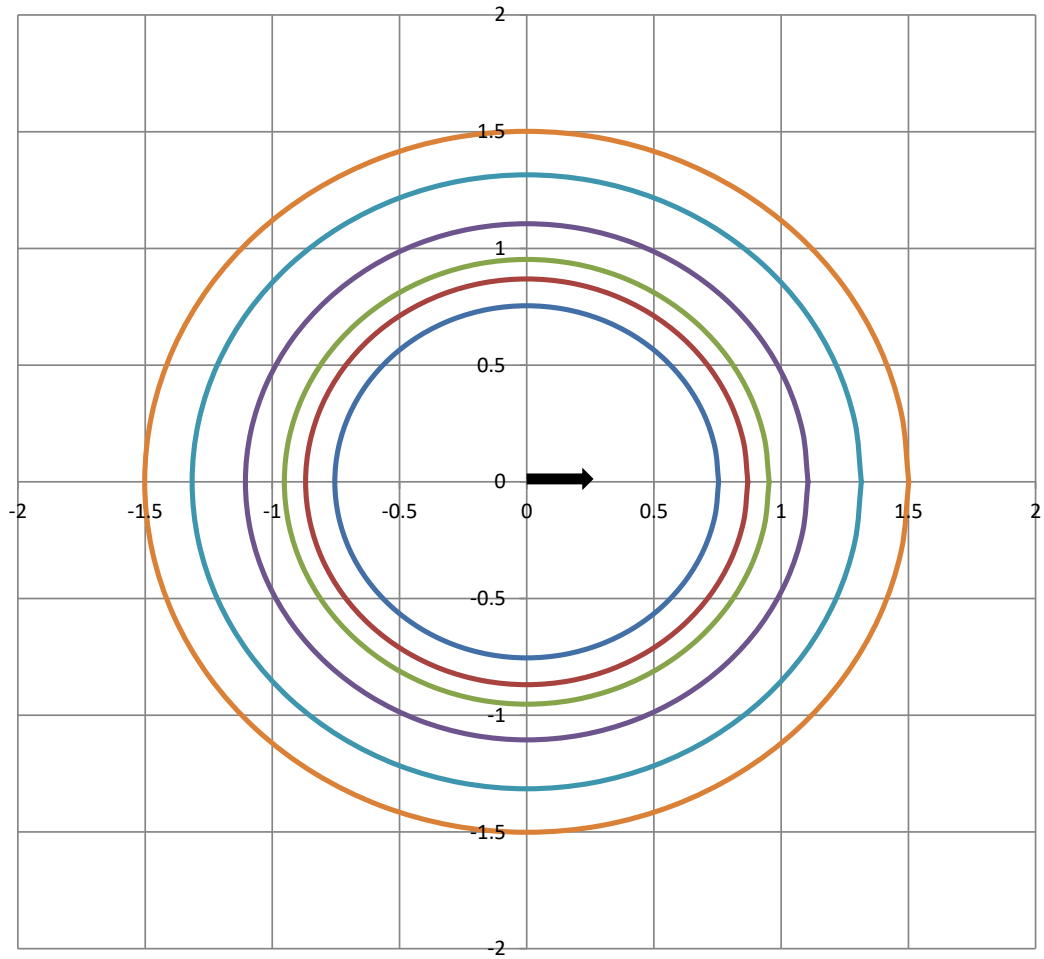
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	12370 Candela
Central Cone Intensity:	12132 Candela
Beam Flux:	2586.3 Lumens
Beam Angle (0-180):	35.8 Degrees
Beam Angle (90-270):	35.8 Degrees
Field Angle (0-180):	70.1 Degrees
Field Angle (90-270):	70.1 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		773	2.23
6.00		344	3.34
8.00		193	4.45
10.0		124	5.56
12.0		85.9	6.68
14.0		63.1	7.79
16.0		48.3	8.90



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

