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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  
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United States

**Catalog Number**  
**6PR-L20/835-DIM-UNV-L-M-OF-WH**

Order Number  
12326812  
Test Number  
12326812.31

Test Date

2018-06-08

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, frosted plastic optic, clear glass patterned lens enclosure  
**Lamp:** One white LED  
**Mounting:** Recessed  
**Ballast/Driver:** Philips XI025C070V054DSM5

**Luminaire**



**Luminaire Characteristics**

Luminous Diameter: 5.50 in.

**Summary of Results**

Total Luminaire Output:	2239 Lumens
Luminaire Efficacy:	98.8 lm/w
Maximum Candela:	5151 Candela

**Test Conditions**

Test Temperature:	25.0 °C
Voltage:	120.0 VAC
Current:	0.1895 A
Power:	22.66 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	7.93 %

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



## Distribution - Goniophotometer

### Distribution Test Conditions

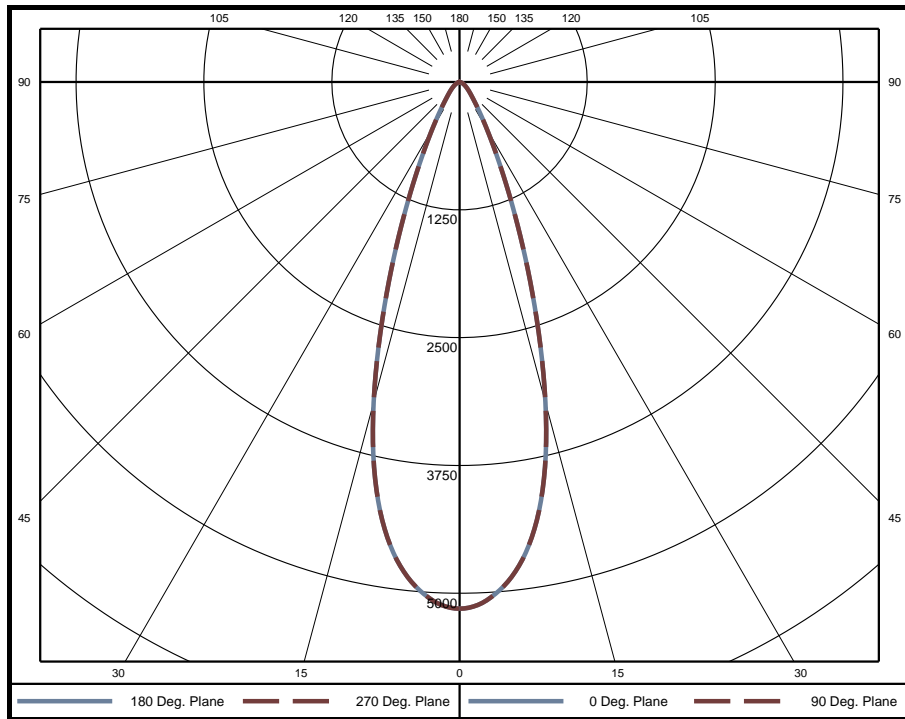
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	120.0 VAC	0.1895 A	22.66 W	0.996	60 Hz	7.93 %

### Summary of Results

Spacing Criteria  
0-180: 0.58  
90-270: 0.58

Total Lumen Output: 2239 Lumens  
Luminaire Efficacy: 98.8 lm/w  
Maximum Candela: 5151 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	120.7	5.4%	60-65	20.6	0.9%	120-125	0	0.0%
5-10	333.3	14.9%	65-70	15.2	0.7%	125-130	0	0.0%
10-15	451.1	20.1%	70-75	10.8	0.5%	130-135	0	0.0%
15-20	420.5	18.8%	75-80	7.0	0.3%	135-140	0	0.0%
20-25	299.9	13.4%	80-85	3.4	0.2%	140-145	0	0.0%
25-30	188.4	8.4%	85-90	0.7	0.0%	145-150	0	0.0%
30-35	118.9	5.3%	90-95	0	0.0%	150-155	0	0.0%
35-40	80.2	3.6%	95-100	0	0.0%	155-160	0	0.0%
40-45	59.2	2.6%	100-105	0	0.0%	160-165	0	0.0%
45-50	46.1	2.1%	105-110	0	0.0%	165-170	0	0.0%
50-55	35.9	1.6%	110-115	0	0.0%	170-175	0	0.0%
55-60	27.4	1.2%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	2013	89.9%
0-60	2182	97.4%
0-90	2239	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	5151	5151	5151	5151	5151	5151	5151	5151	5151	5151	5151	5151	5151	5151	5151
	5	4950	4950	4950	4950	4950	4950	4950	4950	4950	4950	4950	4950	4950	4950	4950
	10	4351	4351	4351	4351	4351	4351	4351	4351	4351	4351	4351	4351	4351	4351	4351
	15	3241	3241	3241	3241	3241	3241	3241	3241	3241	3241	3241	3241	3241	3241	3241
	20	1948	1948	1948	1948	1948	1948	1948	1948	1948	1948	1948	1948	1948	1948	1948
	25	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025
	30	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537
	35	304	304	304	304	304	304	304	304	304	304	304	304	304	304	304
	40	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
	45	134	134	134	134	134	134	134	134	134	134	134	134	134	134	134
	50	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97
	55	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	60	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	65	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
	70	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	75	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	80	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	85	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	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	336000	336000
	45	12360	12360
	55	7948	7948
	65	5493	5493
	75	4202	4202
	85	2448	2448



### 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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88
3	104	98	93	90	102	97	92	89	94	90	87	92	89	86	89	87	85	83
4	99	92	87	84	98	91	87	83	89	85	82	87	84	81	85	83	80	79
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75
6	91	83	78	74	90	83	78	74	81	77	73	80	76	73	79	75	72	71
7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	75	72	69	68
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	72	69	66	65
9	81	73	68	64	80	72	67	64	71	67	64	71	66	64	70	66	63	62
10	78	70	65	61	77	69	65	61	69	64	61	68	64	61	67	64	61	60

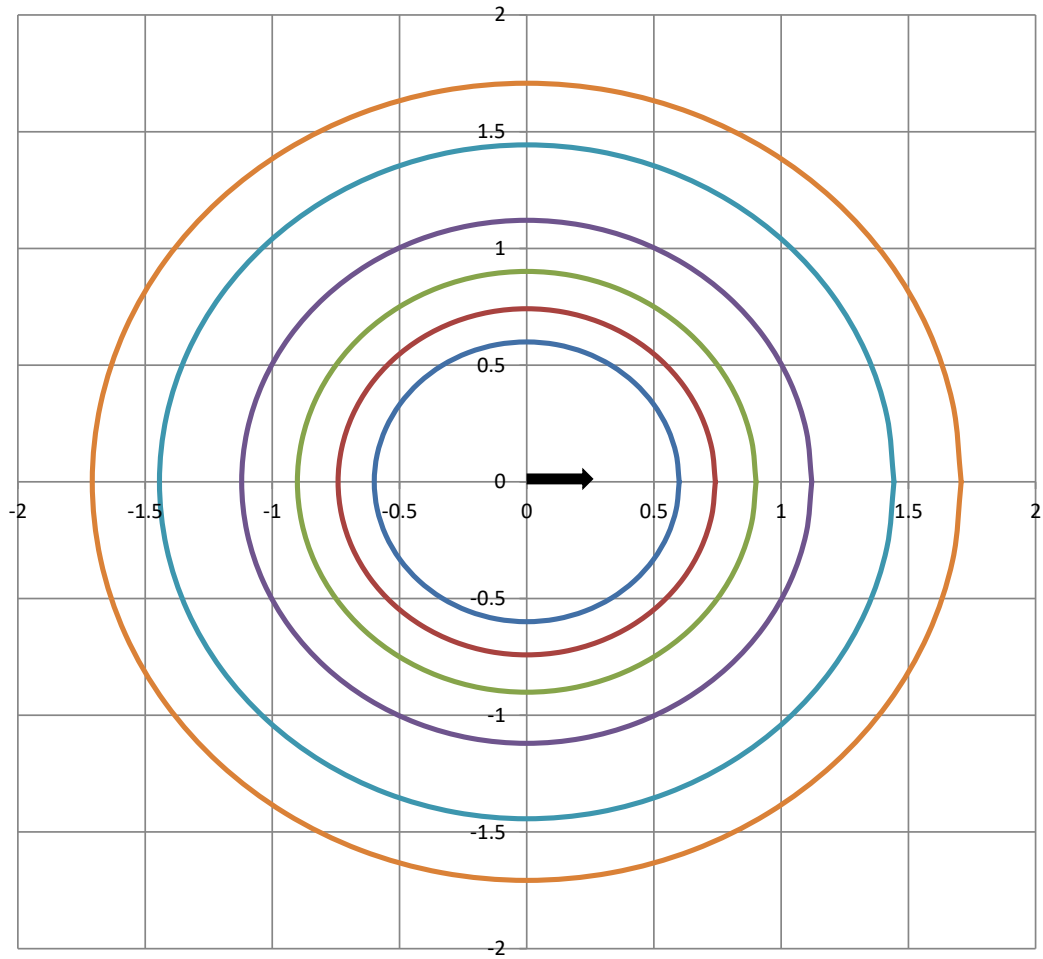
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	5151 Candela
Central Cone Intensity:	5079 Candela
Beam Flux:	1122.8 Lumens
Beam Angle (0-180):	35.0 Degrees
Beam Angle (90-270):	35.0 Degrees
Field Angle (0-180):	60.7 Degrees
Field Angle (90-270):	60.7 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		322	2.33
6.00		143	3.50
8.00		80.5	4.66
10.0		51.5	5.83
12.0		35.8	6.99
14.0		26.3	8.16
16.0		20.1	9.32



## ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

