



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4PR-L18-8TW-DIM-UNV-LN-OF-WH.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from 12316380.32
 [TESTLAB] UL Verification Services Inc.
 [ISSUE DATE] 6/13/2018
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 4PR-L18-8TW-DIM-UNV-LN-OF-WH
 [LUMINAIRE] Black formed aluminum housing, clear plastic optic, white
 [MORE] reflector, clear glass patterned lens enclosure
 [LAMP] One white LED
 [BALLAST] Philips XI025C070V054DSM5
 [OTHER] 25.1 C, 120.057 V, 0.190218 A, 22.7453 W, 0.995981 PF, 59.9705
 [MORE] Hz
 [OTHER] This test was performed using the calibrated photodetector met
 [MORE] hod of absolute photometry.

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1922
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	24
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.46
Spacing Criterion (90-270)	0.46
Spacing Criterion (Diagonal)	0.48
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.35 ft (Diameter)
Luminous Width (90-270)	0.35 ft (Diameter)
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14678	14678	14678
55	10944	10944	10944
65	8883	8883	8883
75	7291	7291	7291
85	4900	4900	4900

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CANDELA TABULATION

	<u>0</u>
0.0	6450.264
0.5	6442.992
1.0	6422.994
1.5	6389.361
2.0	6343.002
2.5	6283.917
3.0	6212.106
3.5	6129.387
4.0	6036.669
4.5	5934.861
5.0	5824.872
5.5	5706.702
6.0	5579.442
6.5	5445.819
7.0	5304.924
7.5	5156.757
8.0	5004.045
8.5	4846.788
9.0	4687.713
9.5	4525.911
10.0	4360.473
10.5	4194.126
11.0	4026.870
11.5	3859.614
12.0	3693.267
12.5	3527.829
13.0	3363.300
13.5	3202.407
14.0	3042.423
14.5	2884.257
15.0	2729.727
15.5	2579.742
16.0	2433.393
16.5	2291.589
17.0	2156.148
17.5	2025.252
18.0	1900.719
18.5	1782.549
19.0	1669.833
19.5	1563.480
20.0	1461.672
20.5	1366.227
21.0	1275.327
21.5	1193.517
22.0	1112.616
22.5	1038.987
23.0	968.994
23.5	903.364
24.0	840.825
24.5	783.103
25.0	729.382
25.5	678.932
26.0	632.391
26.5	588.850

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CANDELA TABULATION - (Cont.)

27.0	548.581
27.5	511.585
28.0	477.225
28.5	445.592
29.0	416.413
29.5	389.597
30.0	364.782
30.5	341.693
31.0	320.513
31.5	301.061
32.0	283.153
32.5	266.791
33.0	251.611
33.5	237.522
34.0	224.523
34.5	212.797
35.0	201.980
35.5	191.890
36.0	182.709
36.5	174.164
37.0	166.256
37.5	159.075
38.0	152.439
38.5	146.258
39.0	140.531
39.5	135.168
40.0	130.169
40.5	125.624
41.0	121.351
41.5	117.352
42.0	113.625
42.5	110.080
43.0	106.717
43.5	103.535
44.0	100.535
44.5	97.717
45.0	94.990
45.5	92.445
46.0	89.991
46.5	87.628
47.0	85.355
47.5	83.083
48.0	80.992
48.5	78.992
49.0	76.992
49.5	74.992
50.0	73.174
50.5	71.447
51.0	69.720
51.5	67.993
52.0	66.357
52.5	64.812
53.0	63.266
53.5	61.812
54.0	60.358
54.5	58.903

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CANDELA TABULATION - (Cont.)

55.0	57.449
55.5	56.085
56.0	54.813
56.5	53.449
57.0	52.177
57.5	50.995
58.0	49.722
58.5	48.541
59.0	47.359
59.5	46.177
60.0	44.995
60.5	43.905
61.0	42.723
61.5	41.632
62.0	40.632
62.5	39.541
63.0	38.451
63.5	37.451
64.0	36.360
64.5	35.360
65.0	34.360
65.5	33.360
66.0	32.451
66.5	31.451
67.0	30.542
67.5	29.542
68.0	28.633
68.5	27.724
69.0	26.906
69.5	25.997
70.0	25.179
70.5	24.270
71.0	23.452
71.5	22.634
72.0	21.816
72.5	21.089
73.0	20.271
73.5	19.543
74.0	18.725
74.5	17.998
75.0	17.271
75.5	16.544
76.0	15.817
76.5	15.089
77.0	14.362
77.5	13.635
78.0	12.908
78.5	12.181
79.0	11.544
79.5	10.817
80.0	10.181
80.5	9.454
81.0	8.817
81.5	8.181
82.0	7.454
82.5	6.817

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CANDELA TABULATION - (Cont.)

83.0	6.181
83.5	5.636
84.0	4.999
84.5	4.454
85.0	3.909
85.5	3.454
86.0	3.000
86.5	2.545
87.0	2.182
87.5	1.818
88.0	1.545
88.5	1.273
89.0	1.000
89.5	0.818
90.0	0.636
90.5	0.000
91.0	0.000
91.5	0.000
92.0	0.000
92.5	0.000
93.0	0.000
93.5	0.000
94.0	0.000
94.5	0.000
95.0	0.000
95.5	0.000
96.0	0.000
96.5	0.000
97.0	0.000
97.5	0.000
98.0	0.000
98.5	0.000
99.0	0.000
99.5	0.000
100.0	0.000
100.5	0.000
101.0	0.000
101.5	0.000
102.0	0.000
102.5	0.000
103.0	0.000
103.5	0.000
104.0	0.000
104.5	0.000
105.0	0.000
105.5	0.000
106.0	0.000
106.5	0.000
107.0	0.000
107.5	0.000
108.0	0.000
108.5	0.000
109.0	0.000
109.5	0.000
110.0	0.000
110.5	0.000

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CANDELA TABULATION - (Cont.)

111.0	0.000
111.5	0.000
112.0	0.000
112.5	0.000
113.0	0.000
113.5	0.000
114.0	0.000
114.5	0.000
115.0	0.000
115.5	0.000
116.0	0.000
116.5	0.000
117.0	0.000
117.5	0.000
118.0	0.000
118.5	0.000
119.0	0.000
119.5	0.000
120.0	0.000
120.5	0.000
121.0	0.000
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
123.5	0.000
124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
132.0	0.000
132.5	0.000
133.0	0.000
133.5	0.000
134.0	0.000
134.5	0.000
135.0	0.000
135.5	0.000
136.0	0.000
136.5	0.000
137.0	0.000
137.5	0.000
138.0	0.000
138.5	0.000

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CANDELA TABULATION - (Cont.)

139.0	0.000
139.5	0.000
140.0	0.000
140.5	0.000
141.0	0.000
141.5	0.000
142.0	0.000
142.5	0.000
143.0	0.000
143.5	0.000
144.0	0.000
144.5	0.000
145.0	0.000
145.5	0.000
146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
148.0	0.000
148.5	0.000
149.0	0.000
149.5	0.000
150.0	0.000
150.5	0.000
151.0	0.000
151.5	0.000
152.0	0.000
152.5	0.000
153.0	0.000
153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
155.5	0.000
156.0	0.000
156.5	0.000
157.0	0.000
157.5	0.000
158.0	0.000
158.5	0.000
159.0	0.000
159.5	0.000
160.0	0.000
160.5	0.000
161.0	0.000
161.5	0.000
162.0	0.000
162.5	0.000
163.0	0.000
163.5	0.000
164.0	0.000
164.5	0.000
165.0	0.000
165.5	0.000
166.0	0.000
166.5	0.000

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CANDELA TABULATION - (Cont.)

167.0	0.000
167.5	0.000
168.0	0.000
168.5	0.000
169.0	0.000
169.5	0.000
170.0	0.000
170.5	0.000
171.0	0.000
171.5	0.000
172.0	0.000
172.5	0.000
173.0	0.000
173.5	0.000
174.0	0.000
174.5	0.000
175.0	0.000
175.5	0.000
176.0	0.000
176.5	0.000
177.0	0.000
177.5	0.000
178.0	0.000
178.5	0.000
179.0	0.000
179.5	0.000
180.0	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1254.18	N.A.	65.30
0-30	1604.68	N.A.	83.50
0-40	1738.00	N.A.	90.40
0-60	1864.44	N.A.	97.00
0-80	1916.98	N.A.	99.70
0-90	1921.82	N.A.	100.00
10-90	1413.68	N.A.	73.60
20-40	483.82	N.A.	25.20
20-50	558.46	N.A.	29.10
40-70	160.66	N.A.	8.40
60-80	52.54	N.A.	2.70
70-80	18.33	N.A.	1.00
80-90	4.84	N.A.	0.30
90-110	0.02	N.A.	0.00
90-120	0.02	N.A.	0.00
90-130	0.02	N.A.	0.00
90-150	0.02	N.A.	0.00
90-180	0.02	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1921.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	508.14
10-20	746.04
20-30	350.50
30-40	133.31
40-50	74.64
50-60	51.80
60-70	34.22
70-80	18.33
80-90	4.84
90-100	0.02
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

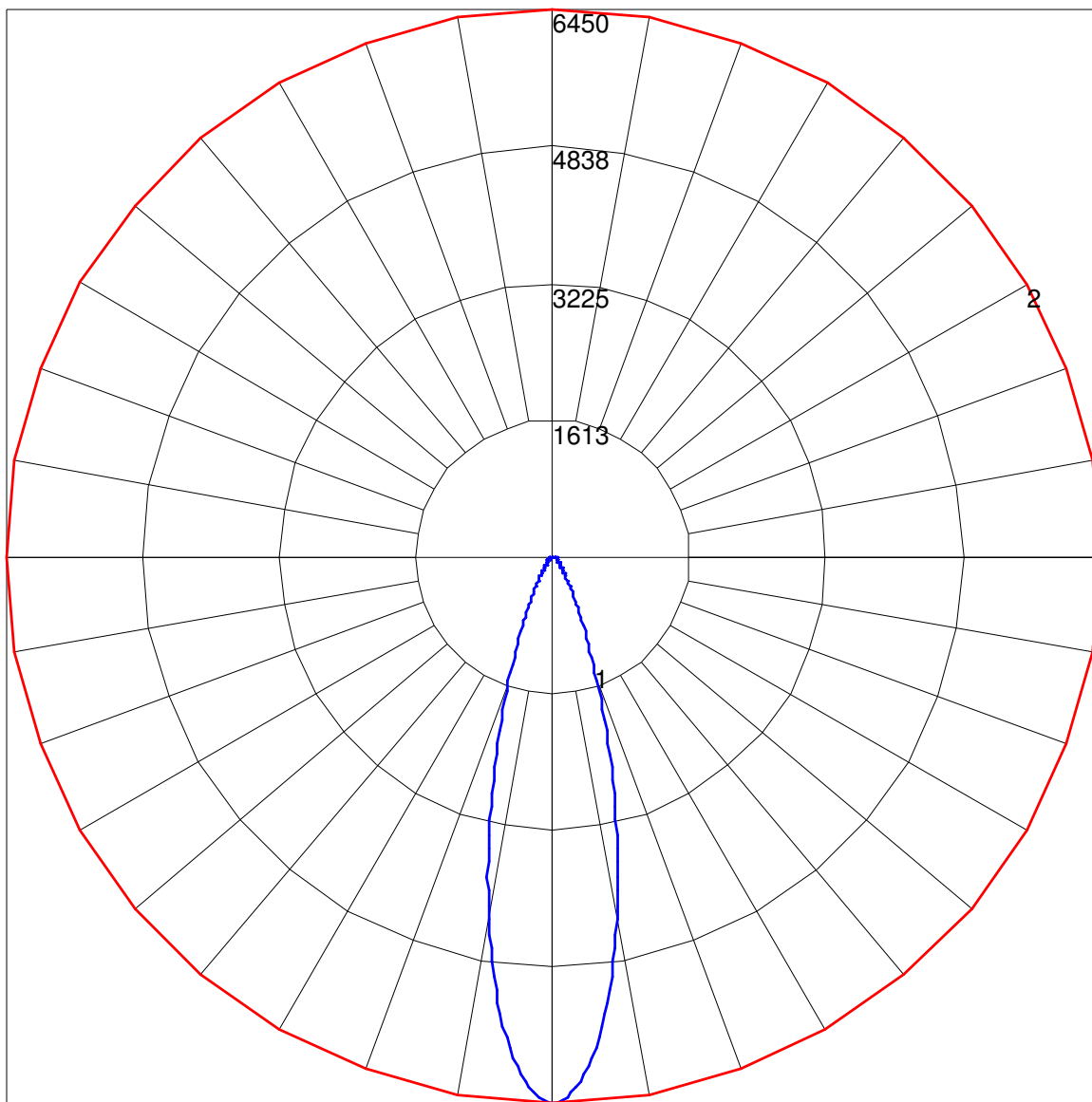
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	108	108	108	108	106	106	106	106	101	101	101	97	97	97	93	93	93	91
1	104	101	99	97	101	99	97	96	96	94	93	92	91	90	89	88	87	86
2	99	95	92	89	97	94	91	88	91	88	86	88	86	84	86	84	83	81
3	95	90	86	83	93	89	85	82	86	83	81	84	82	79	82	80	78	77
4	91	85	81	78	90	84	80	77	82	79	76	81	78	75	79	77	75	73
5	88	81	77	73	86	80	76	73	79	75	72	77	74	72	76	73	71	70
6	85	78	73	70	83	77	73	70	76	72	69	74	71	69	73	70	68	67
7	82	74	70	67	80	74	70	66	73	69	66	72	68	66	71	68	65	64
8	79	72	67	64	78	71	67	64	70	66	63	69	66	63	68	65	63	62
9	76	69	64	61	75	68	64	61	68	64	61	67	63	61	66	63	61	60
10	74	66	62	59	73	66	62	59	65	62	59	65	61	59	64	61	59	58

POLAR GRAPH



Maximum Candela = 6450.264 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)