



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4PR-TL-L10-830-DIM-UNV-SW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]GEN FROM 12316380.33
 [TESTLAB] UL Verification Services Inc.
 [ISSUE DATE] 9-26-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 4PR-TL-L10-830-DIM-UNV-SW-OF-WH
 [LUMINAIRE] Black formed aluminum housing, white reflector, clear glass
 [MORE] s patterned lens enclosure
 [LAMP] One white LED
 [BALLAST] Philips XI050C140V054DSM5
 [OTHER] 25.4 C, 120.043 V, 0.388764 A, 46.5747 W, 0.99799 PF, 59.9703
 [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	767
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	72
Total Luminaire Watts	10.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.84
Spacing Criterion (90-270)	0.84
Spacing Criterion (Diagonal)	1.00
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	19994	19994	19994
55	14147	14147	14147
65	11157	11157	11157
75	9052	9052	9052
85	6613	6613	6613

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CANDELA TABULATION

	<u>0</u>
0.0	624.402
0.5	623.666
1.0	622.194
1.5	619.495
2.0	615.815
2.5	610.908
3.0	605.265
3.5	598.886
4.0	591.771
4.5	584.166
5.0	576.069
5.5	567.237
6.0	558.159
6.5	549.081
7.0	539.758
7.5	530.190
8.0	521.112
8.5	512.034
9.0	503.447
9.5	495.351
10.0	488.236
10.5	481.612
11.0	474.987
11.5	468.608
12.0	462.965
12.5	457.568
13.0	452.906
13.5	448.245
14.0	444.074
14.5	439.903
15.0	435.732
15.5	431.561
16.0	427.881
16.5	424.201
17.0	421.012
17.5	417.822
18.0	415.123
18.5	412.670
19.0	410.216
19.5	408.254
20.0	406.291
20.5	404.573
21.0	402.856
21.5	401.384
22.0	399.667
22.5	397.704
23.0	395.496
23.5	393.288
24.0	391.079
24.5	388.381
25.0	385.437
25.5	382.247
26.0	378.812
26.5	375.377

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CANDELA TABULATION - (Cont.)

27.0	371.697
27.5	367.772
28.0	363.846
28.5	359.430
29.0	355.014
29.5	350.352
30.0	345.445
30.5	340.293
31.0	334.650
31.5	329.007
32.0	323.119
32.5	316.985
33.0	310.361
33.5	303.737
34.0	296.867
34.5	289.997
35.0	282.637
35.5	275.031
36.0	267.180
36.5	259.084
37.0	250.742
37.5	242.376
38.0	233.715
38.5	225.079
39.0	216.419
39.5	207.733
40.0	199.146
40.5	190.608
41.0	182.365
41.5	174.391
42.0	166.736
42.5	159.450
43.0	152.555
43.5	146.152
44.0	140.165
44.5	134.596
45.0	129.395
45.5	124.635
46.0	120.317
46.5	116.318
47.0	112.613
47.5	109.203
48.0	106.038
48.5	103.069
49.0	100.297
49.5	97.647
50.0	95.169
50.5	92.765
51.0	90.483
51.5	88.250
52.0	86.116
52.5	84.031
53.0	82.019
53.5	80.031
54.0	78.093
54.5	76.155

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CANDELA TABULATION - (Cont.)

55.0	74.266
55.5	72.450
56.0	70.659
56.5	68.893
57.0	67.151
57.5	65.458
58.0	63.765
58.5	62.146
59.0	60.527
59.5	58.932
60.0	57.362
60.5	55.816
61.0	54.319
61.5	52.798
62.0	51.351
62.5	49.903
63.0	48.529
63.5	47.131
64.0	45.781
64.5	44.456
65.0	43.156
65.5	41.905
66.0	40.654
66.5	39.427
67.0	38.249
67.5	37.047
68.0	35.894
68.5	34.741
69.0	33.588
69.5	32.459
70.0	31.355
70.5	30.251
71.0	29.196
71.5	28.141
72.0	27.111
72.5	26.129
73.0	25.148
73.5	24.191
74.0	23.259
74.5	22.351
75.0	21.443
75.5	20.560
76.0	19.677
76.5	18.793
77.0	17.910
77.5	17.076
78.0	16.217
78.5	15.359
79.0	14.524
79.5	13.715
80.0	12.905
80.5	12.095
81.0	11.310
81.5	10.525
82.0	9.765
82.5	9.004

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CANDELA TABULATION - (Cont.)

83.0	8.244
83.5	7.483
84.0	6.747
84.5	6.011
85.0	5.275
85.5	4.490
86.0	3.705
86.5	2.969
87.0	2.331
87.5	1.766
88.0	1.325
88.5	0.932
89.0	0.638
89.5	0.368
90.0	0.221
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
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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
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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	175.19	N.A.	22.80
0-30	351.15	N.A.	45.80
0-40	524.40	N.A.	68.40
0-60	695.21	N.A.	90.60
0-80	761.13	N.A.	99.20
0-90	767.19	N.A.	100.00
10-90	715.24	N.A.	93.20
20-40	349.22	N.A.	45.50
20-50	453.14	N.A.	59.10
40-70	213.88	N.A.	27.90
60-80	65.92	N.A.	8.60
70-80	22.84	N.A.	3.00
80-90	6.07	N.A.	0.80
90-110	0.01	N.A.	0.00
90-120	0.01	N.A.	0.00
90-130	0.01	N.A.	0.00
90-150	0.01	N.A.	0.00
90-180	0.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	767.20	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	51.95
10-20	123.24
20-30	175.96
30-40	173.26
40-50	103.93
50-60	66.88
60-70	43.08
70-80	22.84
80-90	6.07
90-100	0.01
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89
2	103	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	53	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	54	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

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UGR TABLE - CORRECTED

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	18.4	19.7	18.8	20.0	20.3	18.4	19.7	18.8	20.0	20.3
	3H	19.8	20.9	20.1	21.3	21.6	19.8	20.9	20.1	21.3	21.6
	4H	20.2	21.4	20.6	21.7	22.1	20.2	21.4	20.6	21.7	22.1
	6H	20.6	21.6	21.0	22.0	22.4	20.6	21.6	21.0	22.0	22.4
	8H	20.7	21.7	21.2	22.1	22.5	20.7	21.7	21.2	22.1	22.5
	12H	20.8	21.7	21.2	22.1	22.5	20.8	21.7	21.2	22.1	22.5

UGR Viewed Endwise

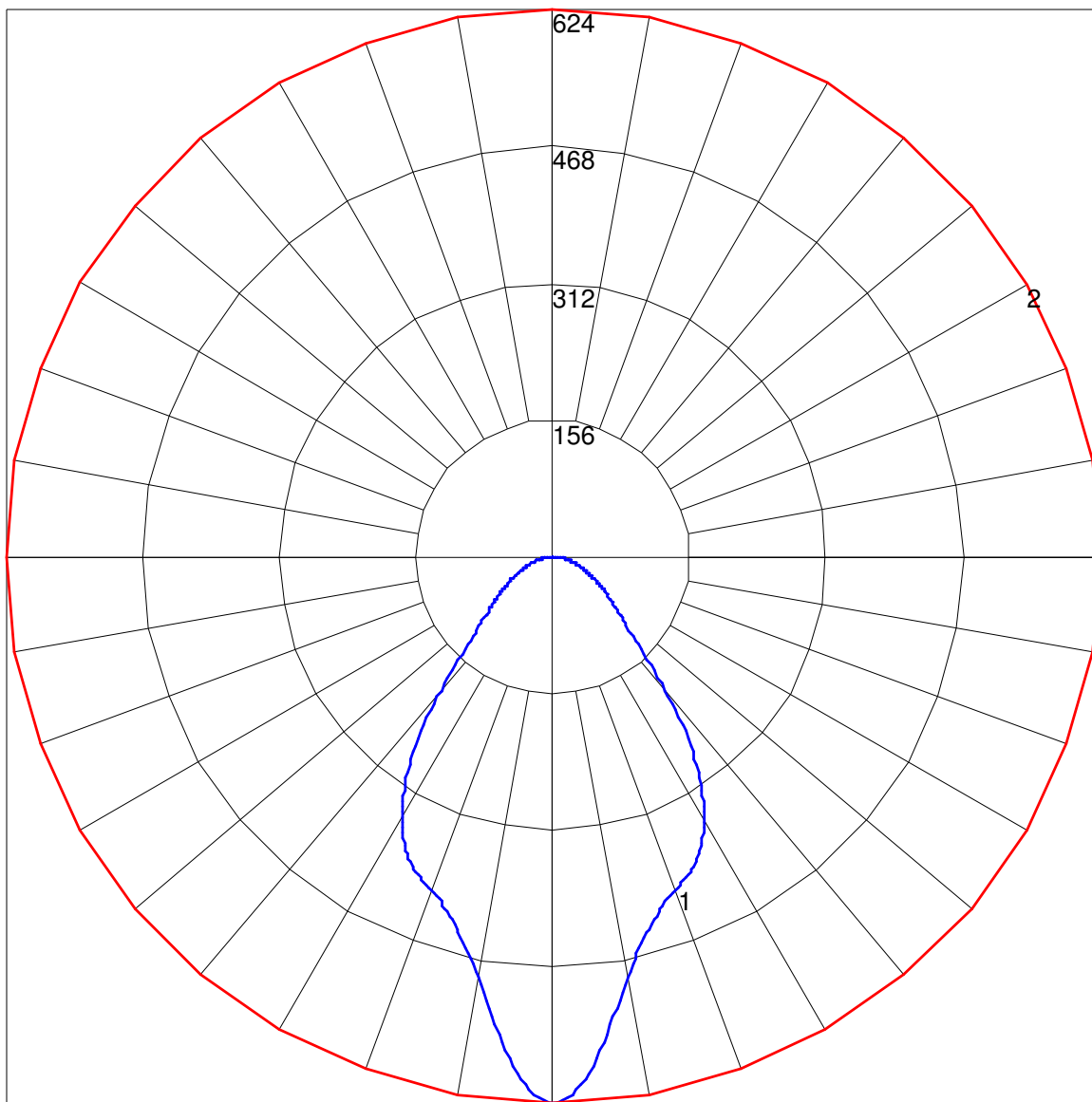
4H	2H	18.8	19.9	19.2	20.3	20.7	18.8	19.9	19.2	20.3	20.7
	3H	20.4	21.3	20.8	21.7	22.1	20.4	21.3	20.8	21.7	22.1
	4H	21.0	21.8	21.5	22.3	22.7	21.0	21.8	21.5	22.3	22.7
	6H	21.5	22.2	22.0	22.7	23.1	21.5	22.2	22.0	22.7	23.1
	8H	21.7	22.3	22.1	22.8	23.3	21.7	22.3	22.1	22.8	23.3
	12H	21.8	22.4	22.3	22.8	23.3	21.8	22.4	22.3	22.8	23.3

8H	4H	21.2	21.9	21.7	22.3	22.8	21.2	21.9	21.7	22.3	22.8
	6H	21.8	22.4	22.3	22.9	23.4	21.8	22.4	22.3	22.9	23.4
	8H	22.1	22.6	22.6	23.1	23.6	22.1	22.6	22.6	23.1	23.6
	12H	22.2	22.7	22.7	23.2	23.7	22.2	22.7	22.7	23.2	23.7

12H	4H	21.2	21.8	21.7	22.3	22.8	21.2	21.8	21.7	22.3	22.8
	6H	21.9	22.4	22.4	22.8	23.4	21.9	22.4	22.4	22.8	23.4
	8H	22.1	22.6	22.6	23.1	23.6	22.1	22.6	22.6	23.1	23.6

Maximum UGR = 23.7

POLAR GRAPH



Maximum Candela = 624.402 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.)