

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4LDR-L30-940-BL-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.05
[TESTLAB] UL, LLC
[ISSUE DATE] 2025-12-10
[TEST DATE] 11/11/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 4LDR-L30-940-BL-DIM-UNV
[LUMINAIRE] 4" recessed downlight with textured black finish reflector
[MORE] and top diffuser lens
[LAMP] LED
[BALLAST] 0-10V LED DRIVER

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1025
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	39
Total Luminaire Watts	26
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.00
Spacing Criterion (90-270)	1.00
Spacing Criterion (Diagonal)	0.94
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.38 ft (Diameter)
Luminous Width (90-270)	0.38 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	12856	12856	12856
55	1665	1665	1665
65	578	578	578
75	250	250	250
85	164	164	164

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CANDELA TABULATION

	<u>0</u>
0.0	1025.120
0.5	1025.120
1.0	1025.120
1.5	1024.382
2.0	1023.645
2.5	1022.907
3.0	1022.170
3.5	1019.957
4.0	1018.482
4.5	1017.008
5.0	1014.795
5.5	1013.320
6.0	1010.370
6.5	1008.158
7.0	1005.208
7.5	1002.258
8.0	999.308
8.5	995.620
9.0	991.933
9.5	988.245
10.0	984.558
10.5	980.133
11.0	975.708
11.5	971.283
12.0	966.120
12.5	961.695
13.0	955.795
13.5	951.370
14.0	945.470
14.5	940.308
15.0	934.408
15.5	928.508
16.0	923.345
16.5	917.445
17.0	913.021
17.5	907.121
18.0	901.221
18.5	895.321
19.0	887.946
19.5	879.833
20.0	871.721
20.5	863.608
21.0	854.021
21.5	844.433
22.0	833.371
22.5	822.308
23.0	809.771
23.5	796.496
24.0	781.746
24.5	766.259
25.0	750.771
25.5	734.546
26.0	717.584
26.5	700.105

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L30-940-BL-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

27.0	682.184
27.5	663.747
28.0	644.867
28.5	625.692
29.0	606.443
29.5	586.973
30.0	567.577
30.5	548.034
31.0	528.416
31.5	508.872
32.0	489.476
32.5	470.228
33.0	451.200
33.5	432.542
34.0	414.178
34.5	395.962
35.0	378.188
35.5	360.709
36.0	343.526
36.5	326.490
37.0	309.896
37.5	293.524
38.0	277.520
38.5	261.811
39.0	246.324
39.5	231.058
40.0	216.234
40.5	201.779
41.0	187.693
41.5	174.049
42.0	160.848
42.5	148.089
43.0	135.994
43.5	124.416
44.0	113.427
44.5	103.102
45.0	93.367
45.5	84.222
46.0	75.741
46.5	67.923
47.0	60.770
47.5	54.206
48.0	48.232
48.5	42.775
49.0	37.907
49.5	33.556
50.0	29.647
50.5	26.181
51.0	23.157
51.5	20.576
52.0	18.290
52.5	16.299
53.0	14.602
53.5	13.127
54.0	11.874
54.5	10.767

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L30-940-BL-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

55.0	9.809
55.5	9.071
56.0	8.407
56.5	7.891
57.0	7.449
57.5	7.006
58.0	6.564
58.5	6.121
59.0	5.752
59.5	5.310
60.0	5.015
60.5	4.646
61.0	4.351
61.5	4.056
62.0	3.761
62.5	3.540
63.0	3.319
63.5	3.097
64.0	2.876
64.5	2.729
65.0	2.507
65.5	2.360
66.0	2.212
66.5	2.065
67.0	1.917
67.5	1.844
68.0	1.696
68.5	1.622
69.0	1.475
69.5	1.401
70.0	1.327
70.5	1.254
71.0	1.180
71.5	1.106
72.0	1.032
72.5	0.959
73.0	0.885
73.5	0.885
74.0	0.811
74.5	0.737
75.0	0.664
75.5	0.664
76.0	0.590
76.5	0.590
77.0	0.516
77.5	0.516
78.0	0.442
78.5	0.442
79.0	0.442
79.5	0.369
80.0	0.369
80.5	0.295
81.0	0.295
81.5	0.295
82.0	0.295
82.5	0.221

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L30-940-BL-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

83.0	0.221
83.5	0.221
84.0	0.147
84.5	0.147
85.0	0.147
85.5	0.147
86.0	0.147
86.5	0.074
87.0	0.074
87.5	0.074
88.0	0.074
88.5	0.074
89.0	0.074
89.5	0.074
90.0	0.000
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L30-940-BL-DIM-UNV_.IES

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
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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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L30-940-BL-DIM-UNV_.IES

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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L30-940-BL-DIM-UNV_.IES

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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PHOTOMETRIC FILENAME : 4LDR-L30-940-BL-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	358.76	N.A.	35.00
0-30	696.91	N.A.	68.00
0-40	932.92	N.A.	91.00
0-60	1021.82	N.A.	99.60
0-80	1025.29	N.A.	100.00
0-90	1025.47	N.A.	100.00
10-90	929.55	N.A.	90.60
20-40	574.16	N.A.	56.00
20-50	652.24	N.A.	63.60
40-70	91.59	N.A.	8.90
60-80	3.47	N.A.	0.30
70-80	0.79	N.A.	0.10
80-90	0.18	N.A.	0.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1025.47	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	95.92
10-20	262.84
20-30	338.15
30-40	236.00
40-50	78.08
50-60	10.82
60-70	2.69
70-80	0.79
80-90	0.18
90-100	0.00
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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87
3	102	96	90	86	100	94	89	86	91	88	84	89	86	83	87	84	82	80
4	97	89	83	79	95	88	83	79	86	81	78	84	80	77	82	79	76	74
5	92	83	77	73	90	82	77	72	80	75	72	79	74	71	77	73	70	69
6	87	78	72	67	85	77	71	67	75	70	67	74	69	66	73	69	66	64
7	82	73	67	62	81	72	66	62	71	66	62	70	65	62	69	64	61	60
8	78	68	62	58	77	68	62	58	67	61	58	66	61	57	65	60	57	56
9	74	64	58	54	73	64	58	54	63	58	54	62	57	54	61	57	54	52
10	71	61	55	51	70	60	55	51	59	54	51	59	54	50	58	54	50	49

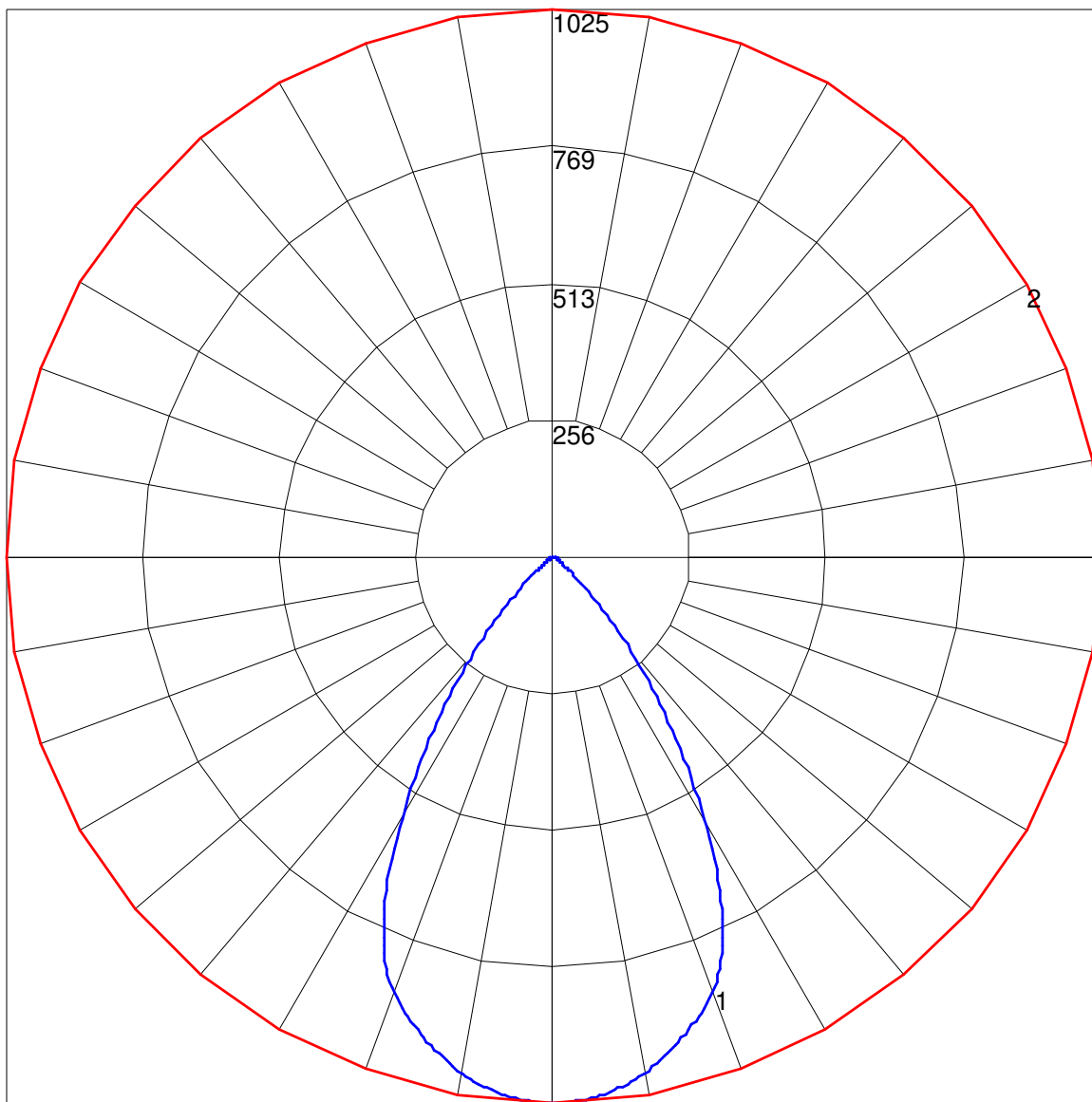
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UGR TABLE - CORRECTED

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					UGR Viewed Endwise				
X=2H	Y=2H	1.8	2.8	2.2	3.1	3.4	1.8	2.8	2.2	3.1	3.4
	3H	1.9	2.8	2.3	3.2	3.5	1.9	2.8	2.3	3.2	3.5
	4H	1.9	2.7	2.3	3.1	3.5	1.9	2.7	2.3	3.1	3.5
	6H	1.9	2.6	2.3	3.0	3.4	1.9	2.6	2.3	3.0	3.4
	8H	1.8	2.5	2.3	2.9	3.3	1.8	2.5	2.3	2.9	3.3
	12H	1.8	2.5	2.2	2.8	3.3	1.8	2.5	2.2	2.8	3.3
4H	2H	1.7	2.5	2.1	2.9	3.3	1.7	2.5	2.1	2.9	3.3
	3H	2.0	2.6	2.4	3.0	3.4	2.0	2.6	2.4	3.0	3.4
	4H	2.0	2.5	2.4	3.0	3.4	2.0	2.5	2.4	3.0	3.4
	6H	1.9	2.4	2.4	2.9	3.4	1.9	2.4	2.4	2.9	3.4
	8H	1.9	2.4	2.4	2.8	3.3	1.9	2.4	2.4	2.8	3.3
	12H	1.9	2.2	2.4	2.7	3.2	1.9	2.2	2.4	2.7	3.2
8H	4H	1.8	2.3	2.3	2.8	3.2	1.8	2.3	2.3	2.8	3.2
	6H	1.8	2.2	2.4	2.7	3.2	1.8	2.2	2.4	2.7	3.2
	8H	1.8	2.1	2.4	2.7	3.2	1.8	2.1	2.4	2.7	3.2
	12H	1.8	2.1	2.3	2.6	3.1	1.8	2.1	2.3	2.6	3.1
12H	4H	1.8	2.2	2.3	2.7	3.1	1.8	2.2	2.3	2.7	3.1
	6H	1.8	2.1	2.3	2.6	3.1	1.8	2.1	2.3	2.6	3.1
	8H	1.8	2.1	2.3	2.6	3.1	1.8	2.1	2.3	2.6	3.1

Maximum UGR = 3.5

POLAR GRAPH



Maximum Candela = 1025.12 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.)