

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L10-840-CS-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.01
[TESTLAB] UL, LLC
[ISSUE DATE] 2025-12-10
[TEST DATE] 11/12/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC.
[LUMCAT] 4LDR-L10-840-CS-DIM-UNV
[LUMINAIRE] 4" recessed downlight with clear semi-specular finish refl
[MORE] ector 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	1047
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	9.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.96
Spacing Criterion (90-270)	0.96
Spacing Criterion (Diagonal)	0.96
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	22785	22785	22785
55	7091	7091	7091
65	275	275	275
75	109	109	109
85	217	217	217

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CANDELA TABULATION

	<u>0</u>
0.0	961.966
0.5	961.966
1.0	961.966
1.5	962.289
2.0	962.612
2.5	962.934
3.0	963.903
3.5	964.549
4.0	964.549
4.5	965.194
5.0	965.517
5.5	965.194
6.0	964.226
6.5	963.257
7.0	961.320
7.5	958.415
8.0	955.510
8.5	952.282
9.0	948.085
9.5	943.566
10.0	938.401
10.5	932.591
11.0	926.457
11.5	919.355
12.0	911.931
12.5	904.184
13.0	896.113
13.5	887.720
14.0	879.005
14.5	869.643
15.0	859.959
15.5	849.952
16.0	839.622
16.5	829.615
17.0	819.608
17.5	809.601
18.0	799.917
18.5	789.910
19.0	780.225
19.5	771.187
20.0	761.503
20.5	752.464
21.0	743.103
21.5	733.741
22.0	724.380
22.5	714.696
23.0	704.689
23.5	694.359
24.0	683.706
24.5	672.731
25.0	661.432
25.5	649.811
26.0	637.867
26.5	625.278

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CANDELA TABULATION - (Cont.)

27.0	612.688
27.5	599.776
28.0	586.218
28.5	572.660
29.0	559.102
29.5	545.222
30.0	531.018
30.5	517.137
31.0	502.934
31.5	488.730
32.0	474.850
32.5	460.969
33.0	447.088
33.5	433.530
34.0	419.972
34.5	407.060
35.0	394.148
35.5	381.881
36.0	368.646
36.5	355.734
37.0	342.821
37.5	330.232
38.0	317.868
38.5	305.537
39.0	293.367
39.5	281.391
40.0	269.609
40.5	258.020
41.0	246.625
41.5	235.520
42.0	224.609
42.5	214.021
43.0	203.691
43.5	193.652
44.0	184.000
44.5	174.542
45.0	165.471
45.5	156.691
46.0	148.265
46.5	140.163
47.0	132.383
47.5	124.926
48.0	117.760
48.5	110.917
49.0	104.331
49.5	98.004
50.0	91.936
50.5	86.157
51.0	80.573
51.5	75.214
52.0	70.017
52.5	65.013
53.0	60.204
53.5	55.458
54.0	50.874
54.5	46.323

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CANDELA TABULATION - (Cont.)

55.0	41.771
55.5	37.155
56.0	32.507
56.5	27.955
57.0	23.630
57.5	19.594
58.0	15.914
58.5	12.589
59.0	9.652
59.5	7.199
60.0	5.294
60.5	3.906
61.0	2.970
61.5	2.453
62.0	2.098
62.5	1.872
63.0	1.679
63.5	1.549
64.0	1.420
64.5	1.291
65.0	1.194
65.5	1.098
66.0	1.033
66.5	0.968
67.0	0.872
67.5	0.839
68.0	0.775
68.5	0.710
69.0	0.678
69.5	0.613
70.0	0.581
70.5	0.549
71.0	0.516
71.5	0.484
72.0	0.452
72.5	0.420
73.0	0.387
73.5	0.355
74.0	0.355
74.5	0.323
75.0	0.291
75.5	0.291
76.0	0.258
76.5	0.258
77.0	0.258
77.5	0.226
78.0	0.226
78.5	0.194
79.0	0.194
79.5	0.194
80.0	0.194
80.5	0.194
81.0	0.194
81.5	0.194
82.0	0.194
82.5	0.161

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CANDELA TABULATION - (Cont.)

83.0	0.194
83.5	0.194
84.0	0.194
84.5	0.194
85.0	0.194
85.5	0.194
86.0	0.194
86.5	0.194
87.0	0.194
87.5	0.226
88.0	0.226
88.5	0.226
89.0	0.226
89.5	0.194
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

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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
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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
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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	331.30	N.A.	31.60
0-30	631.63	N.A.	60.30
0-40	877.12	N.A.	83.70
0-60	1045.38	N.A.	99.80
0-80	1047.24	N.A.	100.00
0-90	1047.45	N.A.	100.00
10-90	956.09	N.A.	91.30
20-40	545.82	N.A.	52.10
20-50	676.03	N.A.	64.50
40-70	169.78	N.A.	16.20
60-80	1.86	N.A.	0.20
70-80	0.35	N.A.	0.00
80-90	0.21	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	1047.45	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	91.37
10-20	239.93
20-30	300.33
30-40	245.49
40-50	130.21
50-60	38.05
60-70	1.52
70-80	0.35
80-90	0.21
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	110	108	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78
4	95	87	81	76	93	86	80	76	84	79	75	82	78	74	80	76	73	72
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	75	71	68	66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61
7	80	70	64	59	79	69	63	59	68	63	58	67	62	58	66	61	58	56
8	76	66	59	55	74	65	59	54	64	58	54	63	58	54	62	57	54	52
9	72	61	55	51	71	61	55	51	60	54	50	59	54	50	58	53	50	49
10	68	58	51	47	67	57	51	47	56	51	47	56	51	47	55	50	47	45

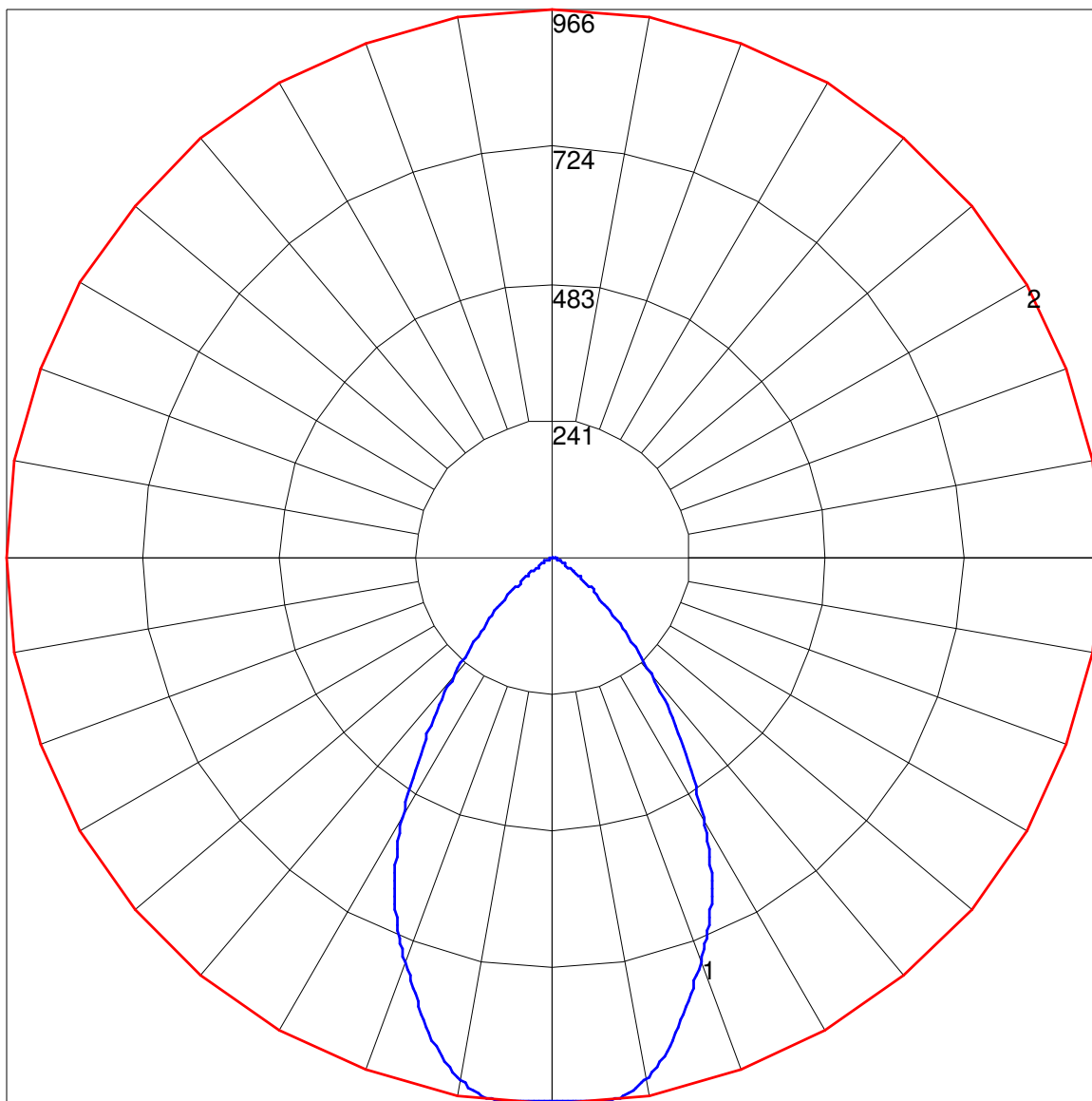
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UGR TABLE - CORRECTED

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	8.4	9.5	8.8	9.8	10.1	8.4	9.5	8.8	9.8	10.1
	3H	8.3	9.2	8.6	9.5	9.9	8.3	9.2	8.6	9.5	9.9
	4H	8.2	9.1	8.6	9.4	9.8	8.2	9.1	8.6	9.4	9.8
	6H	8.1	8.9	8.5	9.2	9.6	8.1	8.9	8.5	9.2	9.6
	8H	8.0	8.8	8.4	9.2	9.6	8.0	8.8	8.4	9.2	9.6
	12H	8.0	8.7	8.4	9.1	9.5	8.0	8.7	8.4	9.1	9.5
4H	2H	8.2	9.0	8.6	9.4	9.8	8.2	9.0	8.6	9.4	9.8
	3H	8.0	8.7	8.4	9.1	9.5	8.0	8.7	8.4	9.1	9.5
	4H	7.9	8.5	8.3	8.9	9.4	7.9	8.5	8.3	8.9	9.4
	6H	7.8	8.3	8.3	8.8	9.2	7.8	8.3	8.3	8.8	9.2
	8H	7.7	8.2	8.2	8.7	9.1	7.7	8.2	8.2	8.7	9.1
	12H	7.7	8.1	8.1	8.6	9.1	7.7	8.1	8.1	8.6	9.1
8H	4H	7.7	8.2	8.2	8.7	9.1	7.7	8.2	8.2	8.7	9.1
	6H	7.6	8.0	8.1	8.5	9.0	7.6	8.0	8.1	8.5	9.0
	8H	7.5	7.9	8.0	8.4	8.9	7.5	7.9	8.0	8.4	8.9
	12H	7.5	7.8	8.0	8.3	8.9	7.5	7.8	8.0	8.3	8.9
12H	4H	7.7	8.1	8.1	8.6	9.1	7.7	8.1	8.1	8.6	9.1
	6H	7.5	7.9	8.1	8.4	8.9	7.5	7.9	8.1	8.4	8.9
	8H	7.5	7.8	8.0	8.3	8.9	7.5	7.8	8.0	8.3	8.9

Maximum UGR = 10.1

POLAR GRAPH



Maximum Candela = 965.517 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)