

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L30-840-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-L30-840-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	3108
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	26
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	67616	67616	67616
55	21042	21042	21042
65	817	817	817
75	324	324	324
85	642	642	642

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CANDELA TABULATION

	<u>0</u>
0.0	2854.684
0.5	2854.684
1.0	2854.684
1.5	2855.642
2.0	2856.600
2.5	2857.558
3.0	2860.432
3.5	2862.347
4.0	2862.347
4.5	2864.263
5.0	2865.221
5.5	2864.263
6.0	2861.390
6.5	2858.516
7.0	2852.768
7.5	2844.146
8.0	2835.525
8.5	2825.945
9.0	2813.492
9.5	2800.081
10.0	2784.754
10.5	2767.511
11.0	2749.310
11.5	2728.235
12.0	2706.202
12.5	2683.211
13.0	2659.263
13.5	2634.356
14.0	2608.491
14.5	2580.711
15.0	2551.972
15.5	2522.276
16.0	2491.622
16.5	2461.925
17.0	2432.229
17.5	2402.533
18.0	2373.794
18.5	2344.098
19.0	2315.359
19.5	2288.537
20.0	2259.798
20.5	2232.976
21.0	2205.195
21.5	2177.415
22.0	2149.634
22.5	2120.896
23.0	2091.200
23.5	2060.545
24.0	2028.933
24.5	1996.363
25.0	1962.835
25.5	1928.349
26.0	1892.904
26.5	1855.545

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CANDELA TABULATION - (Cont.)

27.0	1818.185
27.5	1779.867
28.0	1739.633
28.5	1699.399
29.0	1659.165
29.5	1617.974
30.0	1575.824
30.5	1534.632
31.0	1492.482
31.5	1450.333
32.0	1409.141
32.5	1367.949
33.0	1326.757
33.5	1286.524
34.0	1246.290
34.5	1207.972
35.0	1169.654
35.5	1133.252
36.0	1093.976
36.5	1055.658
37.0	1017.340
37.5	979.980
38.0	943.291
38.5	906.697
39.0	870.583
39.5	835.043
40.0	800.078
40.5	765.688
41.0	731.872
41.5	698.919
42.0	666.540
42.5	635.119
43.0	604.465
43.5	574.673
44.0	546.030
44.5	517.962
45.0	491.044
45.5	464.988
46.0	439.985
46.5	415.941
47.0	392.854
47.5	370.726
48.0	349.459
48.5	329.151
49.0	309.609
49.5	290.833
50.0	272.823
50.5	255.676
51.0	239.104
51.5	223.202
52.0	207.779
52.5	192.931
53.0	178.657
53.5	164.575
54.0	150.973
54.5	137.465

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CANDELA TABULATION - (Cont.)

55.0	123.958
55.5	110.260
56.0	96.465
56.5	82.958
57.0	70.122
57.5	58.147
58.0	47.227
58.5	37.360
59.0	28.643
59.5	21.362
60.0	15.710
60.5	11.591
61.0	8.813
61.5	7.280
62.0	6.227
62.5	5.556
63.0	4.981
63.5	4.598
64.0	4.215
64.5	3.832
65.0	3.544
65.5	3.257
66.0	3.065
66.5	2.874
67.0	2.586
67.5	2.491
68.0	2.299
68.5	2.107
69.0	2.012
69.5	1.820
70.0	1.724
70.5	1.629
71.0	1.533
71.5	1.437
72.0	1.341
72.5	1.245
73.0	1.150
73.5	1.054
74.0	1.054
74.5	0.958
75.0	0.862
75.5	0.862
76.0	0.766
76.5	0.766
77.0	0.766
77.5	0.671
78.0	0.671
78.5	0.575
79.0	0.575
79.5	0.575
80.0	0.575
80.5	0.575
81.0	0.575
81.5	0.575
82.0	0.575
82.5	0.479

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CANDELA TABULATION - (Cont.)

83.0	0.575
83.5	0.575
84.0	0.575
84.5	0.575
85.0	0.575
85.5	0.575
86.0	0.575
86.5	0.575
87.0	0.575
87.5	0.671
88.0	0.671
88.5	0.671
89.0	0.671
89.5	0.575
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
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99.5	0.000
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100.5	0.000
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103.0	0.000
103.5	0.000
104.0	0.000
104.5	0.000
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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
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117.5	0.000
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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
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146.5	0.000
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147.5	0.000
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152.0	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	983.14	N.A.	31.60
0-30	1874.38	N.A.	60.30
0-40	2602.89	N.A.	83.70
0-60	3102.22	N.A.	99.80
0-80	3107.75	N.A.	100.00
0-90	3108.38	N.A.	100.00
10-90	2837.23	N.A.	91.30
20-40	1619.75	N.A.	52.10
20-50	2006.15	N.A.	64.50
40-70	503.82	N.A.	16.20
60-80	5.53	N.A.	0.20
70-80	1.03	N.A.	0.00
80-90	0.63	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	3108.38	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	271.14
10-20	712.00
20-30	891.24
30-40	728.51
40-50	386.40
50-60	112.93
60-70	4.50
70-80	1.03
80-90	0.63
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	77	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	66	63	70	66	62	61
7	80	70	64	59	79	69	63	59	68	62	58	67	62	58	66	61	58	56
8	76	65	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

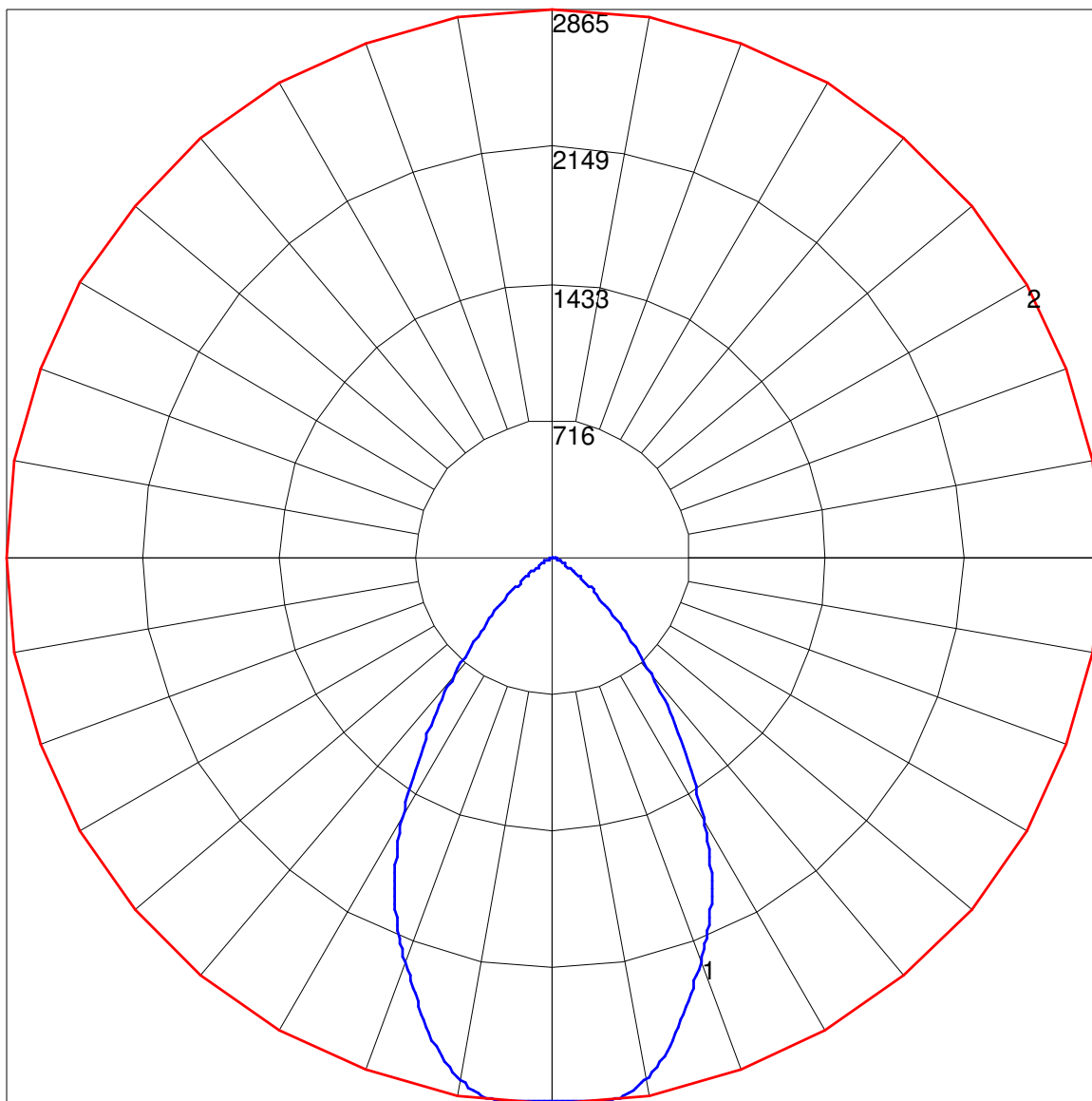
Reflectances

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	12.2	13.3	12.6	13.6	13.9	12.2	13.3	12.6	13.6	13.9
	3H	12.1	13.0	12.5	13.3	13.7	12.1	13.0	12.5	13.3	13.7
	4H	12.0	12.9	12.4	13.2	13.6	12.0	12.9	12.4	13.2	13.6
	6H	11.9	12.7	12.3	13.0	13.4	11.9	12.7	12.3	13.0	13.4
	8H	11.8	12.6	12.3	13.0	13.4	11.8	12.6	12.3	13.0	13.4
	12H	11.8	12.5	12.2	12.9	13.3	11.8	12.5	12.2	12.9	13.3
4H	2H	12.0	12.8	12.4	13.2	13.6	12.0	12.8	12.4	13.2	13.6
	3H	11.8	12.5	12.2	12.9	13.3	11.8	12.5	12.2	12.9	13.3
	4H	11.7	12.3	12.1	12.7	13.2	11.7	12.3	12.1	12.7	13.2
	6H	11.6	12.1	12.1	12.6	13.0	11.6	12.1	12.1	12.6	13.0
	8H	11.5	12.0	12.0	12.5	12.9	11.5	12.0	12.0	12.5	12.9
	12H	11.5	11.9	12.0	12.4	12.9	11.5	11.9	12.0	12.4	12.9
8H	4H	11.5	12.0	12.0	12.5	12.9	11.5	12.0	12.0	12.5	12.9
	6H	11.4	11.8	11.9	12.3	12.8	11.4	11.8	11.9	12.3	12.8
	8H	11.3	11.7	11.9	12.2	12.7	11.3	11.7	11.9	12.2	12.7
	12H	11.3	11.6	11.8	12.1	12.7	11.3	11.6	11.8	12.1	12.7
12H	4H	11.5	11.9	11.9	12.4	12.9	11.5	11.9	11.9	12.4	12.9
	6H	11.3	11.7	11.9	12.2	12.7	11.3	11.7	11.9	12.2	12.7
	8H	11.3	11.6	11.8	12.1	12.7	11.3	11.6	11.8	12.1	12.7

Maximum UGR = 13.9

POLAR GRAPH



Maximum Candela = 2865.221 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.)