

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4LDR-L15-830-WH-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.02
[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-L15-830-WH-DIM-UNV
[LUMINAIRE] 4" recessed downlight with textured white 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	1289
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	93
Total Luminaire Watts	13.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	1.04
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	30805	30805	30805
55	20706	20706	20706
65	15597	15597	15597
75	11843	11843	11843
85	8662	8662	8662

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CANDELA TABULATION

	<u>0</u>
0.0	878.977
0.5	879.441
1.0	878.977
1.5	878.512
2.0	878.048
2.5	877.584
3.0	876.655
3.5	875.726
4.0	874.798
4.5	873.405
5.0	872.476
5.5	870.619
6.0	869.690
6.5	867.368
7.0	865.511
7.5	863.189
8.0	861.332
8.5	859.010
9.0	856.224
9.5	853.439
10.0	851.117
10.5	848.331
11.0	845.545
11.5	842.295
12.0	838.580
12.5	835.330
13.0	832.079
13.5	827.900
14.0	824.186
14.5	820.471
15.0	816.292
15.5	812.113
16.0	807.470
16.5	803.291
17.0	798.648
17.5	793.540
18.0	788.897
18.5	783.789
19.0	778.217
19.5	772.645
20.0	766.609
20.5	760.573
21.0	754.072
21.5	746.643
22.0	739.213
22.5	731.320
23.0	722.962
23.5	713.675
24.0	703.460
24.5	693.709
25.0	682.565
25.5	671.421
26.0	660.742
26.5	648.669

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CANDELA TABULATION - (Cont.)

27.0	636.596
27.5	623.595
28.0	611.058
28.5	598.521
29.0	585.984
29.5	574.376
30.0	562.304
30.5	549.302
31.0	536.301
31.5	522.836
32.0	509.834
32.5	496.833
33.0	483.832
33.5	471.295
34.0	458.479
34.5	445.989
35.0	433.684
35.5	421.472
36.0	409.446
36.5	397.513
37.0	385.765
37.5	374.204
38.0	362.827
38.5	351.451
39.0	340.354
39.5	329.349
40.0	318.577
40.5	307.897
41.0	297.496
41.5	287.235
42.0	277.344
42.5	267.593
43.0	258.214
43.5	249.113
44.0	240.291
44.5	231.840
45.0	223.714
45.5	215.913
46.0	208.484
46.5	201.426
47.0	194.694
47.5	188.332
48.0	182.296
48.5	176.538
49.0	171.106
49.5	165.905
50.0	161.030
50.5	156.340
51.0	151.929
51.5	147.703
52.0	143.664
52.5	139.763
53.0	136.002
53.5	132.334
54.0	128.805
54.5	125.369

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CANDELA TABULATION - (Cont.)

55.0	121.979
55.5	118.776
56.0	115.711
56.5	112.693
57.0	109.675
57.5	106.703
58.0	103.731
58.5	100.760
59.0	97.881
59.5	95.095
60.0	92.309
60.5	89.616
61.0	86.923
61.5	84.369
62.0	81.815
62.5	79.354
63.0	76.939
63.5	74.571
64.0	72.157
64.5	69.928
65.0	67.699
65.5	65.517
66.0	63.335
66.5	61.245
67.0	59.202
67.5	57.205
68.0	55.255
68.5	53.305
69.0	51.401
69.5	49.544
70.0	47.733
70.5	45.969
71.0	44.204
71.5	42.486
72.0	40.815
72.5	39.189
73.0	37.564
73.5	36.032
74.0	34.500
74.5	32.967
75.0	31.482
75.5	30.042
76.0	28.649
76.5	27.256
77.0	25.910
77.5	24.563
78.0	23.309
78.5	22.009
79.0	20.756
79.5	19.548
80.0	18.341
80.5	17.180
81.0	16.019
81.5	14.905
82.0	13.837
82.5	12.769

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CANDELA TABULATION - (Cont.)

83.0	11.701
83.5	10.680
84.0	9.704
84.5	8.683
85.0	7.754
85.5	6.826
86.0	5.897
86.5	5.015
87.0	4.133
87.5	3.297
88.0	2.507
88.5	1.718
89.0	1.022
89.5	0.464
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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120.5	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
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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
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152.0	0.000
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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	312.02	N.A.	24.20
0-30	621.98	N.A.	48.30
0-40	892.72	N.A.	69.30
0-60	1178.74	N.A.	91.40
0-80	1280.16	N.A.	99.30
0-90	1289.04	N.A.	100.00
10-90	1206.45	N.A.	93.60
20-40	580.70	N.A.	45.00
20-50	756.47	N.A.	58.70
40-70	353.69	N.A.	27.40
60-80	101.41	N.A.	7.90
70-80	33.75	N.A.	2.60
80-90	8.88	N.A.	0.70
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	1289.04	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	82.58
10-20	229.43
20-30	309.96
30-40	270.74
40-50	175.77
50-60	110.25
60-70	67.67
70-80	33.75
80-90	8.88
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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	74	79	75	72	71
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37

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UGR TABLE - CORRECTED

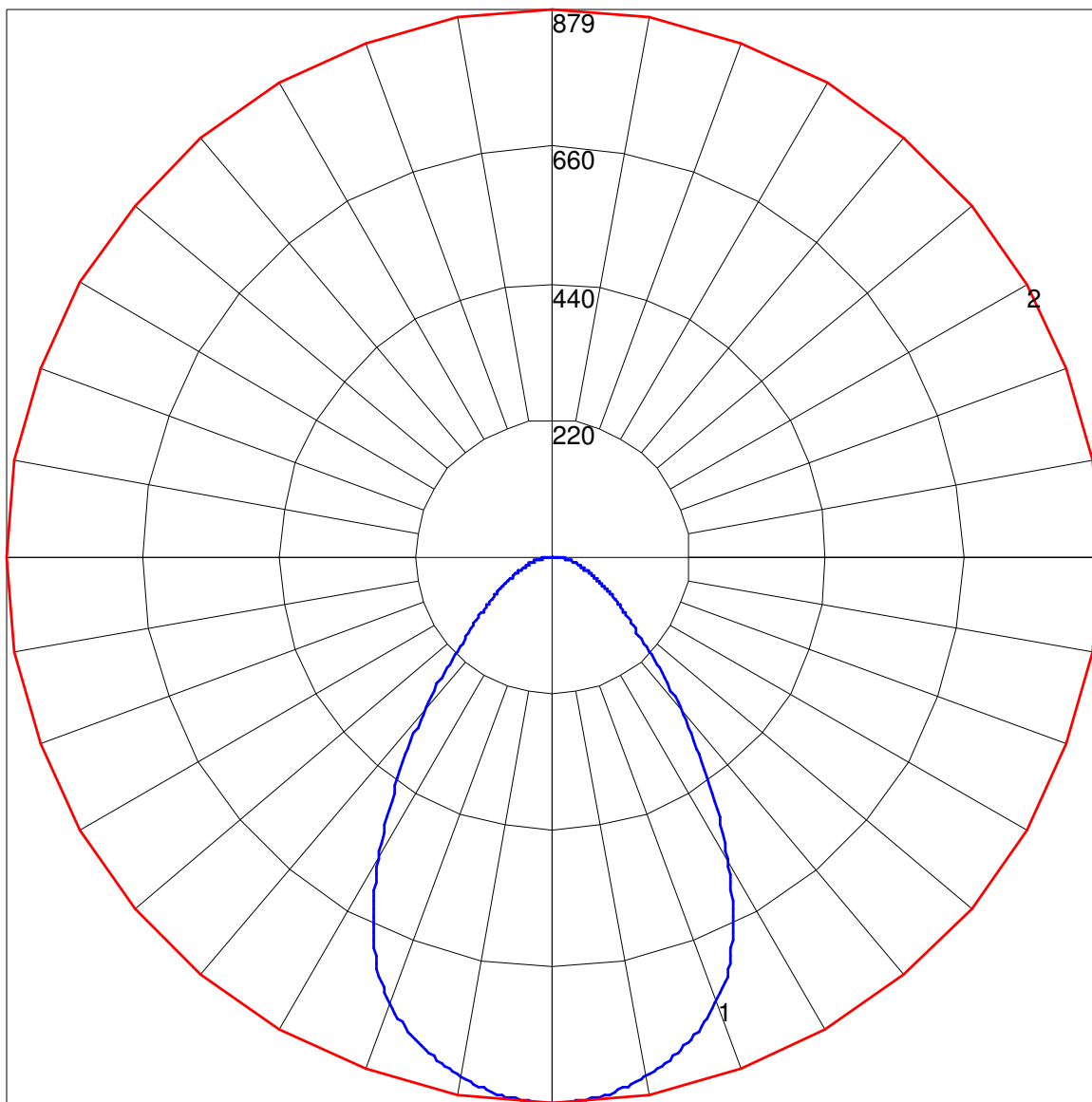
Reflectances

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	19.6	20.9	19.9	21.2	21.5	19.6	20.9	19.9	21.2	21.5
	3H	20.8	22.0	21.2	22.3	22.7	20.8	22.0	21.2	22.3	22.7
	4H	21.2	22.3	21.6	22.7	23.1	21.2	22.3	21.6	22.7	23.1
	6H	21.5	22.5	21.9	22.9	23.3	21.5	22.5	21.9	22.9	23.3
	8H	21.6	22.6	22.1	23.0	23.4	21.6	22.6	22.1	23.0	23.4
	12H	21.7	22.6	22.1	23.0	23.4	21.7	22.6	22.1	23.0	23.4
4H	2H	20.0	21.1	20.4	21.4	21.8	20.0	21.1	20.4	21.4	21.8
	3H	21.4	22.3	21.8	22.7	23.1	21.4	22.3	21.8	22.7	23.1
	4H	22.0	22.8	22.4	23.2	23.6	22.0	22.8	22.4	23.2	23.6
	6H	22.4	23.1	22.8	23.5	24.0	22.4	23.1	22.8	23.5	24.0
	8H	22.5	23.1	22.9	23.6	24.0	22.5	23.1	22.9	23.6	24.0
	12H	22.6	23.1	23.1	23.6	24.1	22.6	23.1	23.1	23.6	24.1
8H	4H	22.1	22.8	22.6	23.2	23.7	22.1	22.8	22.6	23.2	23.7
	6H	22.6	23.2	23.1	23.7	24.1	22.6	23.2	23.1	23.7	24.1
	8H	22.8	23.3	23.3	23.8	24.3	22.8	23.3	23.3	23.8	24.3
	12H	22.9	23.4	23.5	23.9	24.4	22.9	23.4	23.5	23.9	24.4
12H	4H	22.1	22.7	22.6	23.2	23.6	22.1	22.7	22.6	23.2	23.6
	6H	22.6	23.1	23.2	23.6	24.1	22.6	23.1	23.2	23.6	24.1
	8H	22.9	23.3	23.4	23.8	24.4	22.9	23.3	23.4	23.8	24.4

Maximum UGR = 24.4

POLAR GRAPH



Maximum Candela = 879.441 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.)