

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4LDR-L15-835-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-L15-835-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	1302
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
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	31116	31116	31116
55	20916	20916	20916
65	15755	15755	15755
75	11963	11963	11963
85	8751	8751	8751

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CANDELA TABULATION

	<u>0</u>
0.0	887.855
0.5	888.324
1.0	887.855
1.5	887.386
2.0	886.917
2.5	886.448
3.0	885.510
3.5	884.572
4.0	883.634
4.5	882.227
5.0	881.289
5.5	879.413
6.0	878.475
6.5	876.130
7.0	874.254
7.5	871.909
8.0	870.032
8.5	867.687
9.0	864.873
9.5	862.059
10.0	859.714
10.5	856.900
11.0	854.086
11.5	850.803
12.0	847.050
12.5	843.767
13.0	840.484
13.5	836.263
14.0	832.511
14.5	828.759
15.0	824.537
15.5	820.316
16.0	815.626
16.5	811.405
17.0	806.715
17.5	801.556
18.0	796.865
18.5	791.706
19.0	786.078
19.5	780.450
20.0	774.352
20.5	768.255
21.0	761.689
21.5	754.184
22.0	746.680
22.5	738.707
23.0	730.264
23.5	720.884
24.0	710.566
24.5	700.716
25.0	689.460
25.5	678.203
26.0	667.416
26.5	655.221

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PHOTOMETRIC FILENAME : 4LDR-L15-835-WH-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

27.0	643.027
27.5	629.894
28.0	617.231
28.5	604.567
29.0	591.903
29.5	580.178
30.0	567.983
30.5	554.851
31.0	541.718
31.5	528.117
32.0	514.984
32.5	501.852
33.0	488.719
33.5	476.055
34.0	463.111
34.5	450.494
35.0	438.065
35.5	425.730
36.0	413.582
36.5	401.528
37.0	389.662
37.5	377.983
38.0	366.492
38.5	355.001
39.0	343.792
39.5	332.676
40.0	321.795
40.5	311.007
41.0	300.501
41.5	290.136
42.0	280.146
42.5	270.296
43.0	260.822
43.5	251.629
44.0	242.718
44.5	234.182
45.0	225.974
45.5	218.094
46.0	210.590
46.5	203.461
47.0	196.660
47.5	190.235
48.0	184.137
48.5	178.321
49.0	172.834
49.5	167.581
50.0	162.656
50.5	157.919
51.0	153.463
51.5	149.195
52.0	145.115
52.5	141.175
53.0	137.376
53.5	133.671
54.0	130.106
54.5	126.635

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PHOTOMETRIC FILENAME : 4LDR-L15-835-WH-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

55.0	123.212
55.5	119.975
56.0	116.880
56.5	113.831
57.0	110.783
57.5	107.781
58.0	104.779
58.5	101.777
59.0	98.869
59.5	96.055
60.0	93.241
60.5	90.521
61.0	87.801
61.5	85.221
62.0	82.641
62.5	80.156
63.0	77.717
63.5	75.325
64.0	72.886
64.5	70.634
65.0	68.383
65.5	66.179
66.0	63.974
66.5	61.864
67.0	59.800
67.5	57.783
68.0	55.813
68.5	53.844
69.0	51.921
69.5	50.044
70.0	48.215
70.5	46.433
71.0	44.651
71.5	42.915
72.0	41.227
72.5	39.585
73.0	37.944
73.5	36.396
74.0	34.848
74.5	33.300
75.0	31.800
75.5	30.346
76.0	28.939
76.5	27.531
77.0	26.171
77.5	24.811
78.0	23.545
78.5	22.232
79.0	20.965
79.5	19.746
80.0	18.526
80.5	17.354
81.0	16.181
81.5	15.056
82.0	13.977
82.5	12.898

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PHOTOMETRIC FILENAME : 4LDR-L15-835-WH-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

83.0	11.819
83.5	10.787
84.0	9.803
84.5	8.771
85.0	7.833
85.5	6.895
86.0	5.957
86.5	5.065
87.0	4.174
87.5	3.330
88.0	2.533
88.5	1.735
89.0	1.032
89.5	0.469
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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PHOTOMETRIC FILENAME : 4LDR-L15-835-WH-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
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136.5	0.000
137.0	0.000
137.5	0.000
138.0	0.000
138.5	0.000

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PHOTOMETRIC FILENAME : 4LDR-L15-835-WH-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
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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

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PHOTOMETRIC FILENAME : 4LDR-L15-835-WH-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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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	315.17	N.A.	24.20
0-30	628.26	N.A.	48.30
0-40	901.74	N.A.	69.30
0-60	1190.65	N.A.	91.40
0-80	1293.09	N.A.	99.30
0-90	1302.06	N.A.	100.00
10-90	1218.64	N.A.	93.60
20-40	586.57	N.A.	45.00
20-50	764.11	N.A.	58.70
40-70	357.26	N.A.	27.40
60-80	102.44	N.A.	7.90
70-80	34.09	N.A.	2.60
80-90	8.97	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	1302.06	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	83.42
10-20	231.75
20-30	313.09
30-40	273.48
40-50	177.55
50-60	111.37
60-70	68.35
70-80	34.09
80-90	8.97
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

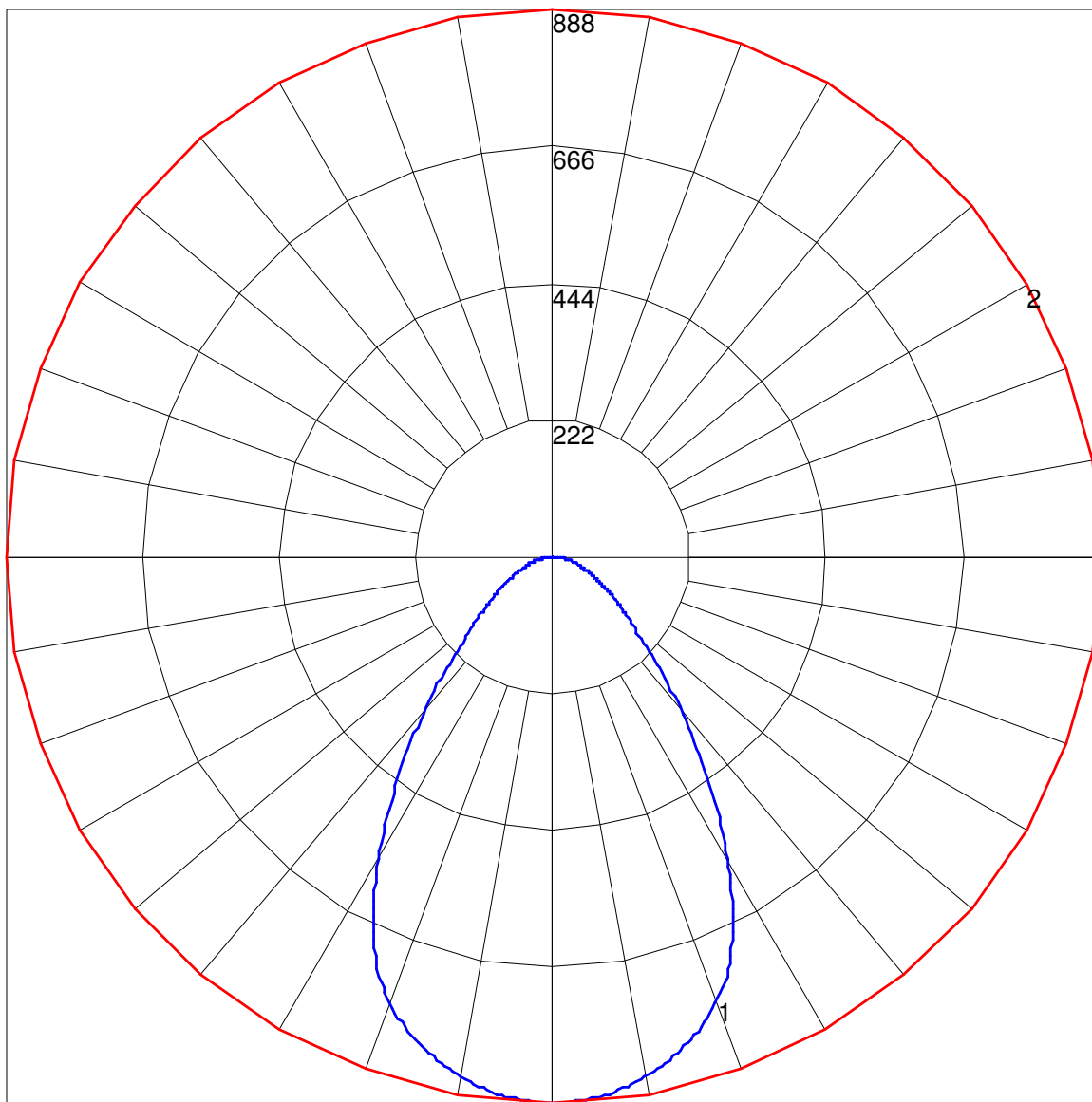
Reflectances

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	24.1	22.5	23.1	22.9	23.6	24.1
	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	23.0	23.4	23.5	23.9	24.4	23.0	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 = 888.324 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.)