

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4LDR-L15-835-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-L15-835-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	606
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	44
Total Luminaire Watts	13.8
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	7600	7600	7600
55	984	984	984
65	341	341	341
75	147	147	147
85	97	97	97

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-835-BL-DIM-UNV_.IES

CANDELA TABULATION

	<u>0</u>
0.0	606.000
0.5	606.000
1.0	606.000
1.5	605.564
2.0	605.128
2.5	604.692
3.0	604.256
3.5	602.948
4.0	602.076
4.5	601.204
5.0	599.896
5.5	599.024
6.0	597.281
6.5	595.973
7.0	594.229
7.5	592.485
8.0	590.741
8.5	588.561
9.0	586.381
9.5	584.201
10.0	582.022
10.5	579.406
11.0	576.790
11.5	574.174
12.0	571.122
12.5	568.506
13.0	565.019
13.5	562.403
14.0	558.915
14.5	555.863
15.0	552.376
15.5	548.888
16.0	545.836
16.5	542.348
17.0	539.732
17.5	536.245
18.0	532.757
18.5	529.269
19.0	524.909
19.5	520.114
20.0	515.318
20.5	510.522
21.0	504.855
21.5	499.187
22.0	492.647
22.5	486.108
23.0	478.696
23.5	470.849
24.0	462.129
24.5	452.974
25.0	443.819
25.5	434.227
26.0	424.200
26.5	413.867

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-835-BL-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

27.0	403.273
27.5	392.374
28.0	381.213
28.5	369.878
29.0	358.499
29.5	346.989
30.0	335.523
30.5	323.970
31.0	312.373
31.5	300.820
32.0	289.354
32.5	277.975
33.0	266.727
33.5	255.697
34.0	244.841
34.5	234.073
35.0	223.566
35.5	213.234
36.0	203.075
36.5	193.004
37.0	183.195
37.5	173.517
38.0	164.056
38.5	154.770
39.0	145.614
39.5	136.590
40.0	127.827
40.5	119.282
41.0	110.955
41.5	102.889
42.0	95.085
42.5	87.543
43.0	80.393
43.5	73.548
44.0	67.052
44.5	60.949
45.0	55.194
45.5	49.788
46.0	44.774
46.5	40.153
47.0	35.924
47.5	32.044
48.0	28.513
48.5	25.286
49.0	22.409
49.5	19.837
50.0	17.526
50.5	15.477
51.0	13.689
51.5	12.164
52.0	10.812
52.5	9.635
53.0	8.632
53.5	7.760
54.0	7.019
54.5	6.365

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-835-BL-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

55.0	5.798
55.5	5.362
56.0	4.970
56.5	4.665
57.0	4.403
57.5	4.142
58.0	3.880
58.5	3.619
59.0	3.401
59.5	3.139
60.0	2.965
60.5	2.747
61.0	2.572
61.5	2.398
62.0	2.223
62.5	2.093
63.0	1.962
63.5	1.831
64.0	1.700
64.5	1.613
65.0	1.482
65.5	1.395
66.0	1.308
66.5	1.221
67.0	1.134
67.5	1.090
68.0	1.003
68.5	0.959
69.0	0.872
69.5	0.828
70.0	0.785
70.5	0.741
71.0	0.698
71.5	0.654
72.0	0.610
72.5	0.567
73.0	0.523
73.5	0.523
74.0	0.480
74.5	0.436
75.0	0.392
75.5	0.392
76.0	0.349
76.5	0.349
77.0	0.305
77.5	0.305
78.0	0.262
78.5	0.262
79.0	0.262
79.5	0.218
80.0	0.218
80.5	0.174
81.0	0.174
81.5	0.174
82.0	0.174
82.5	0.131

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-835-BL-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

83.0	0.131
83.5	0.131
84.0	0.087
84.5	0.087
85.0	0.087
85.5	0.087
86.0	0.087
86.5	0.044
87.0	0.044
87.5	0.044
88.0	0.044
88.5	0.044
89.0	0.044
89.5	0.044
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-L15-835-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
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
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-L15-835-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-L15-835-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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-835-BL-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	212.08	N.A.	35.00
0-30	411.98	N.A.	68.00
0-40	551.49	N.A.	91.00
0-60	604.05	N.A.	99.60
0-80	606.10	N.A.	100.00
0-90	606.21	N.A.	100.00
10-90	549.50	N.A.	90.60
20-40	339.41	N.A.	56.00
20-50	385.57	N.A.	63.60
40-70	54.14	N.A.	8.90
60-80	2.05	N.A.	0.30
70-80	0.46	N.A.	0.10
80-90	0.11	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	606.21	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	56.70
10-20	155.38
20-30	199.90
30-40	139.51
40-50	46.16
50-60	6.40
60-70	1.59
70-80	0.46
80-90	0.11
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-835-BL-DIM-UNV_.IES

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	86
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	66	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

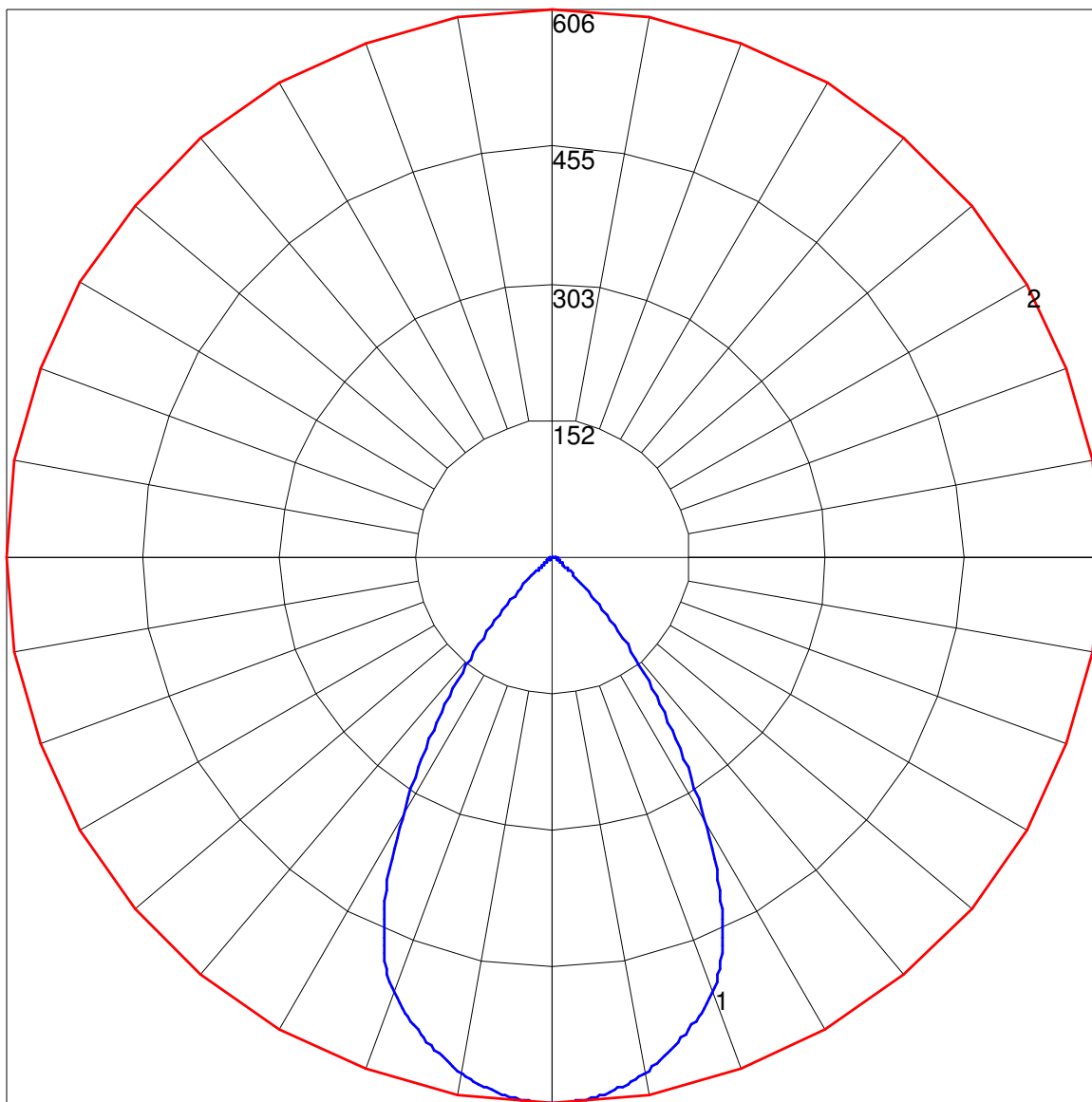
IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-835-BL-DIM-UNV_.IES

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	0.0	1.0	0.4	1.3	1.6	0.0	1.0	0.4	1.3	1.6
	3H	0.1	1.0	0.5	1.4	1.7	0.1	1.0	0.5	1.4	1.7
	4H	0.1	0.9	0.6	1.3	1.7	0.1	0.9	0.6	1.3	1.7
	6H	0.1	0.8	0.5	1.2	1.6	0.1	0.8	0.5	1.2	1.6
	8H	0.1	0.7	0.5	1.1	1.5	0.1	0.7	0.5	1.1	1.5
	12H	0.0	0.7	0.4	1.0	1.5	0.0	0.7	0.4	1.0	1.5
4H	2H	0.0	0.7	0.3	1.1	1.5	0.0	0.7	0.3	1.1	1.5
	3H	0.2	0.8	0.6	1.2	1.6	0.2	0.8	0.6	1.2	1.6
	4H	0.2	0.7	0.6	1.2	1.6	0.2	0.7	0.6	1.2	1.6
	6H	0.1	0.6	0.6	1.1	1.6	0.1	0.6	0.6	1.1	1.6
	8H	0.1	0.6	0.6	1.0	1.5	0.1	0.6	0.6	1.0	1.5
	12H	0.1	0.4	0.6	0.9	1.4	0.1	0.4	0.6	0.9	1.4
8H	4H	0.0	0.5	0.5	1.0	1.4	0.0	0.5	0.5	1.0	1.4
	6H	0.0	0.4	0.6	0.9	1.4	0.0	0.4	0.6	0.9	1.4
	8H	0.0	0.3	0.6	0.9	1.4	0.0	0.3	0.6	0.9	1.4
	12H	0.0	0.3	0.5	0.8	1.3	0.0	0.3	0.5	0.8	1.3
12H	4H	0.0	0.4	0.5	0.9	1.3	0.0	0.4	0.5	0.9	1.3
	6H	0.0	0.3	0.5	0.8	1.3	0.0	0.3	0.5	0.8	1.3
	8H	0.0	0.3	0.5	0.8	1.3	0.0	0.3	0.5	0.8	1.3

Maximum UGR = 1.7

POLAR GRAPH



Maximum Candela = 606 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.)