

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4LDR-L10-835-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-L10-835-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	402
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	43
Total Luminaire Watts	9.3
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	5042	5042	5042
55	653	653	653
65	226	226	226
75	98	98	98
85	65	65	65

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CANDELA TABULATION

	<u>0</u>
0.0	402.000
0.5	402.000
1.0	402.000
1.5	401.711
2.0	401.422
2.5	401.132
3.0	400.843
3.5	399.975
4.0	399.397
4.5	398.819
5.0	397.951
5.5	397.373
6.0	396.216
6.5	395.348
7.0	394.191
7.5	393.034
8.0	391.878
8.5	390.432
9.0	388.986
9.5	387.540
10.0	386.093
10.5	384.358
11.0	382.623
11.5	380.888
12.0	378.863
12.5	377.128
13.0	374.814
13.5	373.079
14.0	370.765
14.5	368.741
15.0	366.427
15.5	364.114
16.0	362.089
16.5	359.775
17.0	358.040
17.5	355.727
18.0	353.413
18.5	351.099
19.0	348.207
19.5	345.026
20.0	341.845
20.5	338.663
21.0	334.904
21.5	331.144
22.0	326.806
22.5	322.468
23.0	317.551
23.5	312.345
24.0	306.561
24.5	300.488
25.0	294.414
25.5	288.052
26.0	281.400
26.5	274.546

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CANDELA TABULATION - (Cont.)

27.0	267.518
27.5	260.288
28.0	252.884
28.5	245.365
29.0	237.816
29.5	230.181
30.0	222.575
30.5	214.911
31.0	207.218
31.5	199.554
32.0	191.948
32.5	184.399
33.0	176.938
33.5	169.621
34.0	162.420
34.5	155.276
35.0	148.306
35.5	141.452
36.0	134.713
36.5	128.033
37.0	121.525
37.5	115.105
38.0	108.829
38.5	102.669
39.0	96.596
39.5	90.609
40.0	84.796
40.5	79.127
41.0	73.604
41.5	68.253
42.0	63.076
42.5	58.073
43.0	53.330
43.5	48.789
44.0	44.480
44.5	40.431
45.0	36.614
45.5	33.028
46.0	29.702
46.5	26.636
47.0	23.831
47.5	21.257
48.0	18.914
48.5	16.774
49.0	14.865
49.5	13.159
50.0	11.626
50.5	10.267
51.0	9.081
51.5	8.069
52.0	7.172
52.5	6.392
53.0	5.726
53.5	5.148
54.0	4.656
54.5	4.222

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CANDELA TABULATION - (Cont.)

55.0	3.846
55.5	3.557
56.0	3.297
56.5	3.095
57.0	2.921
57.5	2.747
58.0	2.574
58.5	2.400
59.0	2.256
59.5	2.082
60.0	1.967
60.5	1.822
61.0	1.706
61.5	1.591
62.0	1.475
62.5	1.388
63.0	1.301
63.5	1.215
64.0	1.128
64.5	1.070
65.0	0.983
65.5	0.925
66.0	0.868
66.5	0.810
67.0	0.752
67.5	0.723
68.0	0.665
68.5	0.636
69.0	0.578
69.5	0.549
70.0	0.521
70.5	0.492
71.0	0.463
71.5	0.434
72.0	0.405
72.5	0.376
73.0	0.347
73.5	0.347
74.0	0.318
74.5	0.289
75.0	0.260
75.5	0.260
76.0	0.231
76.5	0.231
77.0	0.202
77.5	0.202
78.0	0.174
78.5	0.174
79.0	0.174
79.5	0.145
80.0	0.145
80.5	0.116
81.0	0.116
81.5	0.116
82.0	0.116
82.5	0.087

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CANDELA TABULATION - (Cont.)

83.0	0.087
83.5	0.087
84.0	0.058
84.5	0.058
85.0	0.058
85.5	0.058
86.0	0.058
86.5	0.029
87.0	0.029
87.5	0.029
88.0	0.029
88.5	0.029
89.0	0.029
89.5	0.029
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
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
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131.0	0.000
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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

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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
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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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	140.69	N.A.	35.00
0-30	273.29	N.A.	68.00
0-40	365.84	N.A.	91.00
0-60	400.70	N.A.	99.60
0-80	402.07	N.A.	100.00
0-90	402.14	N.A.	100.00
10-90	364.52	N.A.	90.60
20-40	225.15	N.A.	56.00
20-50	255.77	N.A.	63.60
40-70	35.92	N.A.	8.90
60-80	1.36	N.A.	0.30
70-80	0.31	N.A.	0.10
80-90	0.07	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	402.14	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	37.61
10-20	103.07
20-30	132.61
30-40	92.55
40-50	30.62
50-60	4.24
60-70	1.05
70-80	0.31
80-90	0.07
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	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

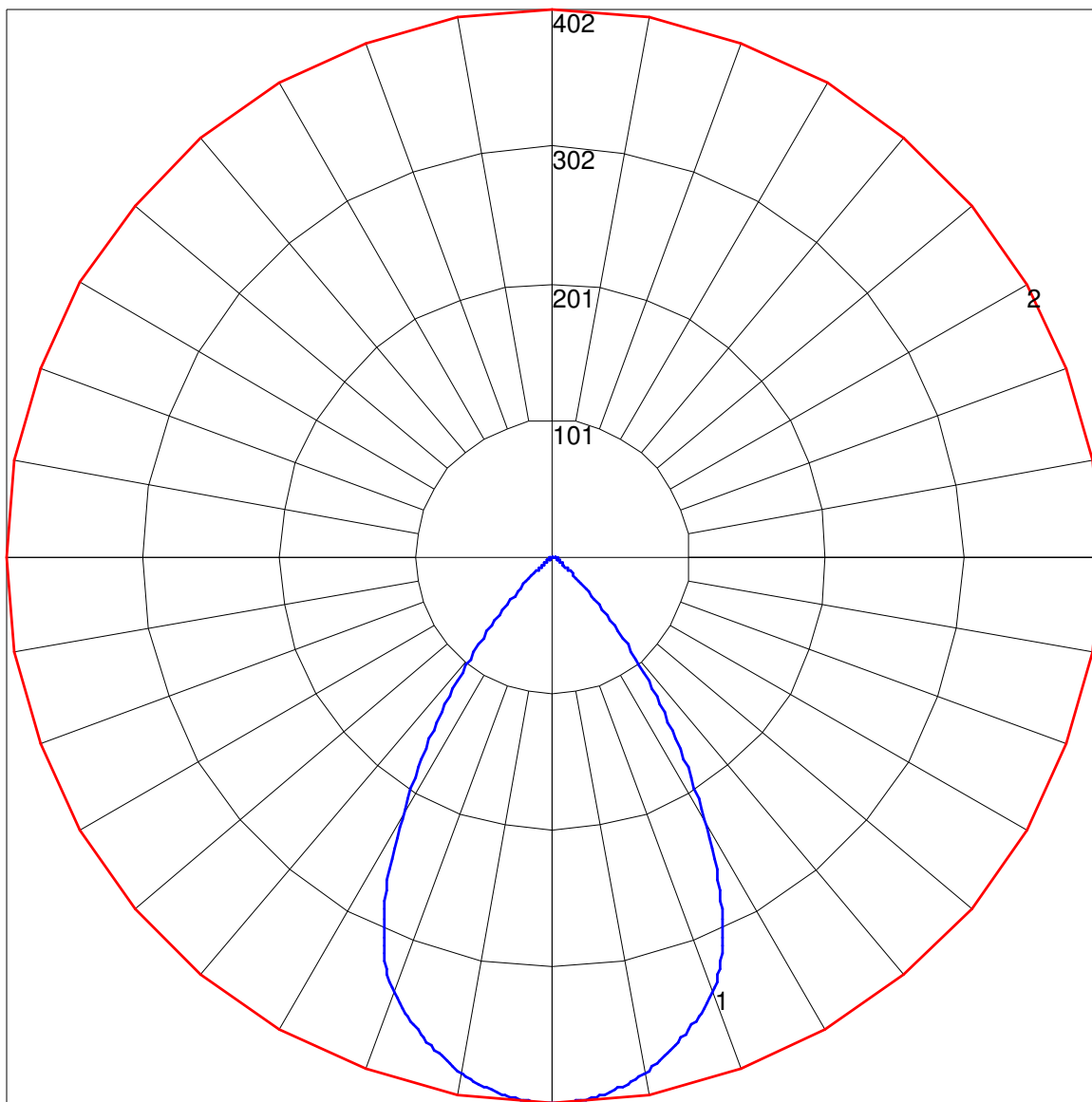
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UGR TABLE - CORRECTED

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	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
	3H	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
	4H	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
	6H	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
	8H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	12H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
4H	2H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	3H	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
	4H	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
	6H	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
	8H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	12H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8H	4H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	12H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12H	4H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Maximum UGR = 0.3

POLAR GRAPH



Maximum Candela = 402 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.)