

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4LDR-L10-830-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-L10-830-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	398
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	4991	4991	4991
55	646	646	646
65	224	224	224
75	97	97	97
85	64	64	64

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CANDELA TABULATION

	<u>0</u>
0.0	397.980
0.5	397.980
1.0	397.980
1.5	397.694
2.0	397.407
2.5	397.121
3.0	396.835
3.5	395.976
4.0	395.403
4.5	394.830
5.0	393.972
5.5	393.399
6.0	392.254
6.5	391.395
7.0	390.249
7.5	389.104
8.0	387.959
8.5	386.527
9.0	385.096
9.5	383.664
10.0	382.233
10.5	380.515
11.0	378.797
11.5	377.079
12.0	375.075
12.5	373.357
13.0	371.066
13.5	369.348
14.0	367.058
14.5	365.054
15.0	362.763
15.5	360.472
16.0	358.468
16.5	356.178
17.0	354.460
17.5	352.169
18.0	349.879
18.5	347.588
19.0	344.725
19.5	341.576
20.0	338.426
20.5	335.277
21.0	331.555
21.5	327.832
22.0	323.538
22.5	319.243
23.0	314.376
23.5	309.222
24.0	303.496
24.5	297.483
25.0	291.470
25.5	285.171
26.0	278.586
26.5	271.800

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**CANDELA TABULATION - (Cont.)**

27.0	264.843
27.5	257.685
28.0	250.355
28.5	242.911
29.0	235.438
29.5	227.879
30.0	220.349
30.5	212.762
31.0	205.146
31.5	197.558
32.0	190.028
32.5	182.555
33.0	175.168
33.5	167.925
34.0	160.795
34.5	153.723
35.0	146.823
35.5	140.037
36.0	133.366
36.5	126.752
37.0	120.310
37.5	113.954
38.0	107.741
38.5	101.642
39.0	95.630
39.5	89.703
40.0	83.948
40.5	78.336
41.0	72.868
41.5	67.571
42.0	62.446
42.5	57.492
43.0	52.797
43.5	48.302
44.0	44.035
44.5	40.027
45.0	36.248
45.5	32.697
46.0	29.405
46.5	26.370
47.0	23.592
47.5	21.044
48.0	18.725
48.5	16.606
49.0	14.717
49.5	13.027
50.0	11.510
50.5	10.164
51.0	8.990
51.5	7.988
52.0	7.101
52.5	6.328
53.0	5.669
53.5	5.096
54.0	4.610
54.5	4.180

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CANDELA TABULATION - (Cont.)

55.0	3.808
55.5	3.522
56.0	3.264
56.5	3.064
57.0	2.892
57.5	2.720
58.0	2.548
58.5	2.376
59.0	2.233
59.5	2.061
60.0	1.947
60.5	1.804
61.0	1.689
61.5	1.575
62.0	1.460
62.5	1.374
63.0	1.288
63.5	1.203
64.0	1.117
64.5	1.059
65.0	0.973
65.5	0.916
66.0	0.859
66.5	0.802
67.0	0.744
67.5	0.716
68.0	0.659
68.5	0.630
69.0	0.573
69.5	0.544
70.0	0.515
70.5	0.487
71.0	0.458
71.5	0.429
72.0	0.401
72.5	0.372
73.0	0.344
73.5	0.344
74.0	0.315
74.5	0.286
75.0	0.258
75.5	0.258
76.0	0.229
76.5	0.229
77.0	0.200
77.5	0.200
78.0	0.172
78.5	0.172
79.0	0.172
79.5	0.143
80.0	0.143
80.5	0.115
81.0	0.115
81.5	0.115
82.0	0.115
82.5	0.086

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CANDELA TABULATION - (Cont.)

83.0	0.086
83.5	0.086
84.0	0.057
84.5	0.057
85.0	0.057
85.5	0.057
86.0	0.057
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
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

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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	139.28	N.A.	35.00
0-30	270.56	N.A.	68.00
0-40	362.18	N.A.	91.00
0-60	396.70	N.A.	99.60
0-80	398.05	N.A.	100.00
0-90	398.12	N.A.	100.00
10-90	360.88	N.A.	90.60
20-40	222.90	N.A.	56.00
20-50	253.22	N.A.	63.60
40-70	35.56	N.A.	8.90
60-80	1.35	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	398.12	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	37.24
10-20	102.04
20-30	131.28
30-40	91.62
40-50	30.31
50-60	4.20
60-70	1.04
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

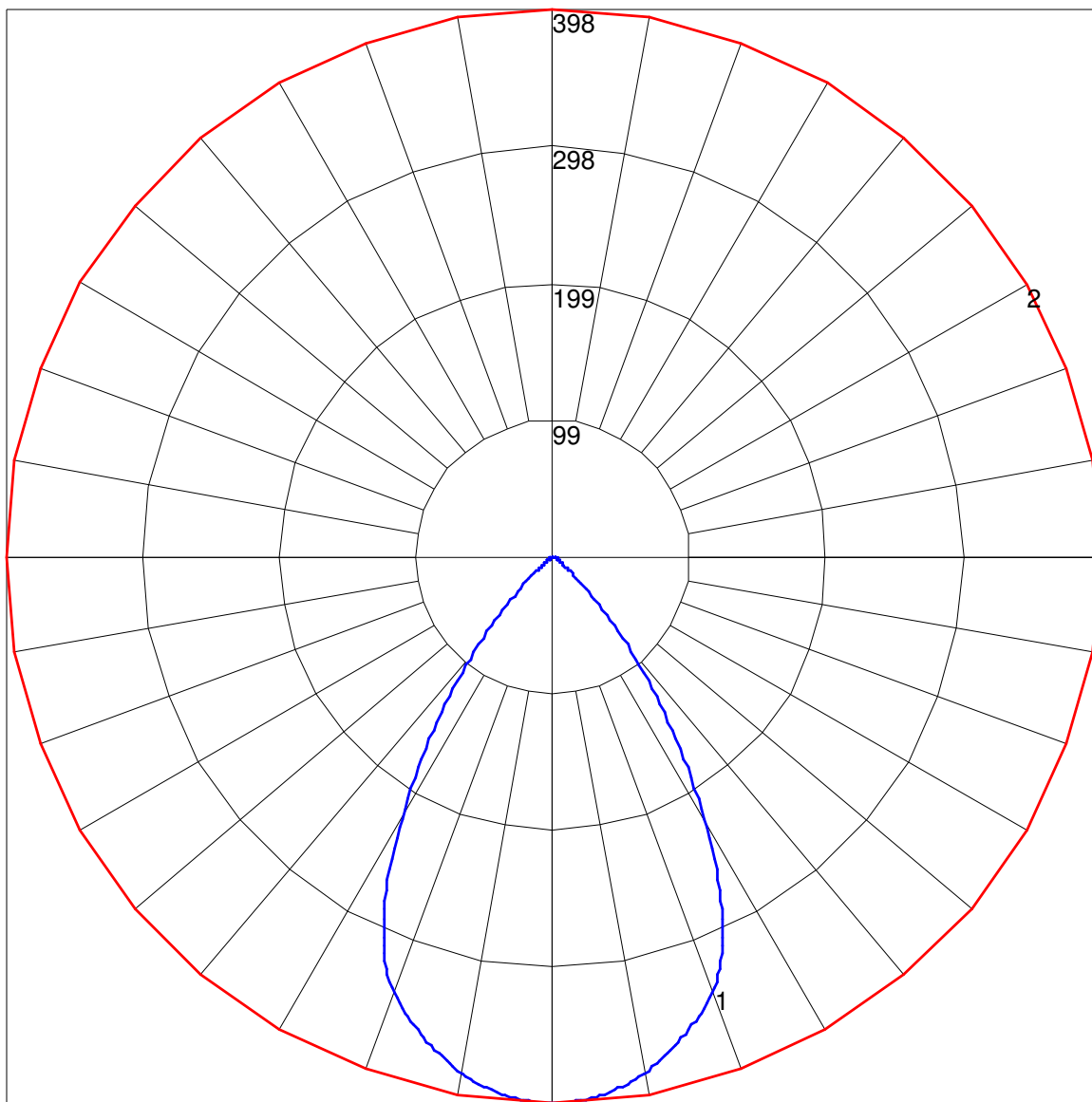
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**UGR TABLE - CORRECTED**

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	0.1	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	0.1	0.0	0.0	0.0	0.0	0.1
	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
4H	2H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	4H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	6H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	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
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 = 0.2

POLAR GRAPH



Maximum Candela = 397.98 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.)