

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L10-830-CS-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.01
[TESTLAB] UL, LLC
[ISSUE DATE] 2025-12-10
[TEST DATE] 11/12/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC.
[LUMCAT] 4LDR-L10-830-CS-DIM-UNV
[LUMINAIRE] 4" recessed downlight with clear semi-specular finish refl
[MORE] ector 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	1007
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	9.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.96
Spacing Criterion (90-270)	0.96
Spacing Criterion (Diagonal)	0.96
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	21900	21900	21900
55	6815	6815	6815
65	264	264	264
75	105	105	105
85	208	208	208

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L10-830-CS-DIM-UNV_.IES

CANDELA TABULATION

	<u>0</u>
0.0	924.608
0.5	924.608
1.0	924.608
1.5	924.918
2.0	925.229
2.5	925.539
3.0	926.470
3.5	927.090
4.0	927.090
4.5	927.711
5.0	928.021
5.5	927.711
6.0	926.780
6.5	925.849
7.0	923.988
7.5	921.195
8.0	918.403
8.5	915.300
9.0	911.267
9.5	906.923
10.0	901.958
10.5	896.374
11.0	890.478
11.5	883.652
12.0	876.516
12.5	869.070
13.0	861.313
13.5	853.246
14.0	844.868
14.5	835.871
15.0	826.562
15.5	816.944
16.0	807.015
16.5	797.397
17.0	787.779
17.5	778.160
18.0	768.852
18.5	759.234
19.0	749.925
19.5	741.238
20.0	731.930
20.5	723.242
21.0	714.244
21.5	705.246
22.0	696.249
22.5	686.940
23.0	677.322
23.5	667.393
24.0	657.154
24.5	646.605
25.0	635.746
25.5	624.576
26.0	613.096
26.5	600.995

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L10-830-CS-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

27.0	588.895
27.5	576.484
28.0	563.453
28.5	550.421
29.0	537.390
29.5	524.048
30.0	510.396
30.5	497.054
31.0	483.403
31.5	469.751
32.0	456.409
32.5	443.067
33.0	429.726
33.5	416.694
34.0	403.663
34.5	391.252
35.0	378.841
35.5	367.051
36.0	354.330
36.5	341.919
37.0	329.508
37.5	317.407
38.0	305.524
38.5	293.672
39.0	281.974
39.5	270.463
40.0	259.139
40.5	248.000
41.0	237.047
41.5	226.374
42.0	215.887
42.5	205.710
43.0	195.781
43.5	186.132
44.0	176.855
44.5	167.764
45.0	159.045
45.5	150.606
46.0	142.508
46.5	134.720
47.0	127.242
47.5	120.075
48.0	113.187
48.5	106.609
49.0	100.280
49.5	94.198
50.0	88.365
50.5	82.811
51.0	77.444
51.5	72.293
52.0	67.298
52.5	62.489
53.0	57.866
53.5	53.305
54.0	48.899
54.5	44.524

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L10-830-CS-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

55.0	40.149
55.5	35.712
56.0	31.244
56.5	26.869
57.0	22.712
57.5	18.833
58.0	15.296
58.5	12.101
59.0	9.277
59.5	6.919
60.0	5.088
60.5	3.754
61.0	2.854
61.5	2.358
62.0	2.017
62.5	1.800
63.0	1.613
63.5	1.489
64.0	1.365
64.5	1.241
65.0	1.148
65.5	1.055
66.0	0.993
66.5	0.931
67.0	0.838
67.5	0.807
68.0	0.745
68.5	0.683
69.0	0.652
69.5	0.590
70.0	0.558
70.5	0.527
71.0	0.496
71.5	0.465
72.0	0.434
72.5	0.403
73.0	0.372
73.5	0.341
74.0	0.341
74.5	0.310
75.0	0.279
75.5	0.279
76.0	0.248
76.5	0.248
77.0	0.248
77.5	0.217
78.0	0.217
78.5	0.186
79.0	0.186
79.5	0.186
80.0	0.186
80.5	0.186
81.0	0.186
81.5	0.186
82.0	0.186
82.5	0.155

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L10-830-CS-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

83.0	0.186
83.5	0.186
84.0	0.186
84.5	0.186
85.0	0.186
85.5	0.186
86.0	0.186
86.5	0.186
87.0	0.186
87.5	0.217
88.0	0.217
88.5	0.217
89.0	0.217
89.5	0.186
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-L10-830-CS-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-L10-830-CS-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-L10-830-CS-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-L10-830-CS-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	318.43	N.A.	31.60
0-30	607.10	N.A.	60.30
0-40	843.06	N.A.	83.70
0-60	1004.78	N.A.	99.80
0-80	1006.57	N.A.	100.00
0-90	1006.78	N.A.	100.00
10-90	918.96	N.A.	91.30
20-40	524.62	N.A.	52.10
20-50	649.78	N.A.	64.50
40-70	163.18	N.A.	16.20
60-80	1.79	N.A.	0.20
70-80	0.33	N.A.	0.00
80-90	0.20	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	1006.78	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	87.82
10-20	230.61
20-30	288.67
30-40	235.96
40-50	125.15
50-60	36.58
60-70	1.46
70-80	0.33
80-90	0.20
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-L10-830-CS-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	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	75	71	68	66
6	85	75	69	64	83	74	68	64	73	67	63	71	66	63	70	66	62	61
7	80	70	64	59	79	69	63	59	68	62	58	67	62	58	66	61	58	56
8	76	65	59	55	74	65	59	54	64	58	54	63	58	54	62	57	54	52
9	72	61	55	51	71	61	55	51	60	54	50	59	54	50	58	53	50	49
10	68	58	51	47	67	57	51	47	56	51	47	56	51	47	55	50	47	45

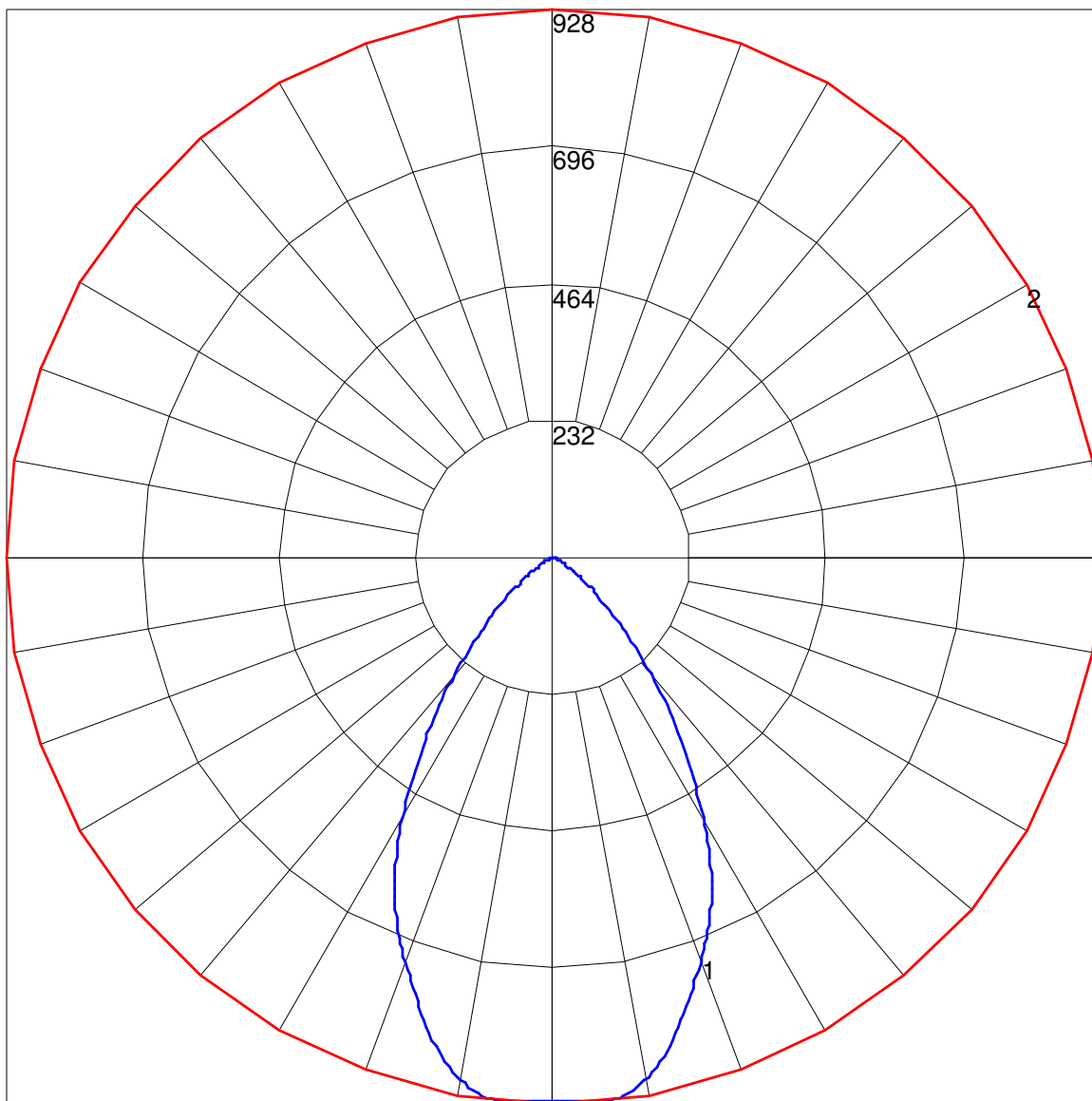
IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L10-830-CS-DIM-UNV_.IES

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	8.2	9.3	8.6	9.6	9.9	8.2	9.3	8.6	9.6	9.9
	3H	8.1	9.0	8.4	9.3	9.7	8.1	9.0	8.4	9.3	9.7
	4H	8.0	8.9	8.4	9.2	9.6	8.0	8.9	8.4	9.2	9.6
	6H	7.9	8.7	8.3	9.0	9.4	7.9	8.7	8.3	9.0	9.4
	8H	7.8	8.6	8.3	9.0	9.4	7.8	8.6	8.3	9.0	9.4
	12H	7.8	8.5	8.2	8.9	9.3	7.8	8.5	8.2	8.9	9.3
4H	2H	8.0	8.8	8.4	9.2	9.6	8.0	8.8	8.4	9.2	9.6
	3H	7.8	8.5	8.2	8.9	9.3	7.8	8.5	8.2	8.9	9.3
	4H	7.7	8.3	8.1	8.7	9.2	7.7	8.3	8.1	8.7	9.2
	6H	7.6	8.1	8.1	8.6	9.0	7.6	8.1	8.1	8.6	9.0
	8H	7.5	8.0	8.0	8.5	8.9	7.5	8.0	8.0	8.5	8.9
	12H	7.5	7.9	7.9	8.4	8.9	7.5	7.9	7.9	8.4	8.9
8H	4H	7.5	8.0	8.0	8.5	8.9	7.5	8.0	8.0	8.5	8.9
	6H	7.4	7.8	7.9	8.3	8.8	7.4	7.8	7.9	8.3	8.8
	8H	7.3	7.7	7.9	8.2	8.7	7.3	7.7	7.9	8.2	8.7
	12H	7.3	7.6	7.8	8.1	8.7	7.3	7.6	7.8	8.1	8.7
12H	4H	7.5	7.9	7.9	8.4	8.9	7.5	7.9	7.9	8.4	8.9
	6H	7.3	7.7	7.9	8.2	8.7	7.3	7.7	7.9	8.2	8.7
	8H	7.3	7.6	7.8	8.1	8.7	7.3	7.6	7.8	8.1	8.7

Maximum UGR = 9.9

POLAR GRAPH



Maximum Candela = 928.021 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.)