

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L10-940-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-L10-940-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	875
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
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	19024	19024	19024
55	5921	5921	5921
65	230	230	230
75	91	91	91
85	181	181	181

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CANDELA TABULATION

	<u>0</u>
0.0	803.195
0.5	803.195
1.0	803.195
1.5	803.464
2.0	803.734
2.5	804.004
3.0	804.812
3.5	805.351
4.0	805.351
4.5	805.890
5.0	806.160
5.5	805.890
6.0	805.082
6.5	804.273
7.0	802.656
7.5	800.230
8.0	797.804
8.5	795.109
9.0	791.605
9.5	787.832
10.0	783.519
10.5	778.668
11.0	773.547
11.5	767.617
12.0	761.418
12.5	754.949
13.0	748.211
13.5	741.203
14.0	733.926
14.5	726.110
15.0	718.024
15.5	709.669
16.0	701.044
16.5	692.688
17.0	684.333
17.5	675.977
18.0	667.892
18.5	659.536
19.0	651.450
19.5	643.904
20.0	635.818
20.5	628.271
21.0	620.455
21.5	612.638
22.0	604.822
22.5	596.736
23.0	588.381
23.5	579.756
24.0	570.861
24.5	561.697
25.0	552.264
25.5	542.561
26.0	532.588
26.5	522.077

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CANDELA TABULATION - (Cont.)

27.0	511.565
27.5	500.784
28.0	489.464
28.5	478.144
29.0	466.823
29.5	455.234
30.0	443.374
30.5	431.785
31.0	419.925
31.5	408.066
32.0	396.476
32.5	384.887
33.0	373.297
33.5	361.977
34.0	350.657
34.5	339.875
35.0	329.094
35.5	318.852
36.0	307.802
36.5	297.020
37.0	286.239
37.5	275.728
38.0	265.405
38.5	255.109
39.0	244.948
39.5	234.948
40.0	225.110
40.5	215.434
41.0	205.920
41.5	196.648
42.0	187.538
42.5	178.697
43.0	170.072
43.5	161.690
44.0	153.631
44.5	145.734
45.0	138.160
45.5	130.829
46.0	123.794
46.5	117.029
47.0	110.534
47.5	104.308
48.0	98.324
48.5	92.610
49.0	87.112
49.5	81.829
50.0	76.762
50.5	71.937
51.0	67.274
51.5	62.800
52.0	58.461
52.5	54.283
53.0	50.267
53.5	46.305
54.0	42.478
54.5	38.677

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CANDELA TABULATION - (Cont.)

55.0	34.877
55.5	31.023
56.0	27.142
56.5	23.341
57.0	19.729
57.5	16.360
58.0	13.288
58.5	10.512
59.0	8.059
59.5	6.010
60.0	4.420
60.5	3.261
61.0	2.480
61.5	2.048
62.0	1.752
62.5	1.563
63.0	1.402
63.5	1.294
64.0	1.186
64.5	1.078
65.0	0.997
65.5	0.916
66.0	0.862
66.5	0.809
67.0	0.728
67.5	0.701
68.0	0.647
68.5	0.593
69.0	0.566
69.5	0.512
70.0	0.485
70.5	0.458
71.0	0.431
71.5	0.404
72.0	0.377
72.5	0.350
73.0	0.323
73.5	0.296
74.0	0.296
74.5	0.270
75.0	0.243
75.5	0.243
76.0	0.216
76.5	0.216
77.0	0.216
77.5	0.189
78.0	0.189
78.5	0.162
79.0	0.162
79.5	0.162
80.0	0.162
80.5	0.162
81.0	0.162
81.5	0.162
82.0	0.162
82.5	0.135

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CANDELA TABULATION - (Cont.)

83.0	0.162
83.5	0.162
84.0	0.162
84.5	0.162
85.0	0.162
85.5	0.162
86.0	0.162
86.5	0.162
87.0	0.162
87.5	0.189
88.0	0.189
88.5	0.189
89.0	0.189
89.5	0.162
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
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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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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	276.62	N.A.	31.60
0-30	527.38	N.A.	60.30
0-40	732.35	N.A.	83.70
0-60	872.84	N.A.	99.80
0-80	874.40	N.A.	100.00
0-90	874.57	N.A.	100.00
10-90	798.29	N.A.	91.30
20-40	455.73	N.A.	52.10
20-50	564.45	N.A.	64.50
40-70	141.76	N.A.	16.20
60-80	1.56	N.A.	0.20
70-80	0.29	N.A.	0.00
80-90	0.18	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	874.57	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	76.29
10-20	200.33
20-30	250.76
30-40	204.97
40-50	108.72
50-60	31.77
60-70	1.27
70-80	0.29
80-90	0.18
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	110	107	105	111	108	106	103	104	102	100	100	99	97	97	95	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	92	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	67	66
6	85	75	69	64	83	74	68	64	73	67	63	71	66	63	70	66	62	61
7	80	70	63	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	50	47	55	50	47	45

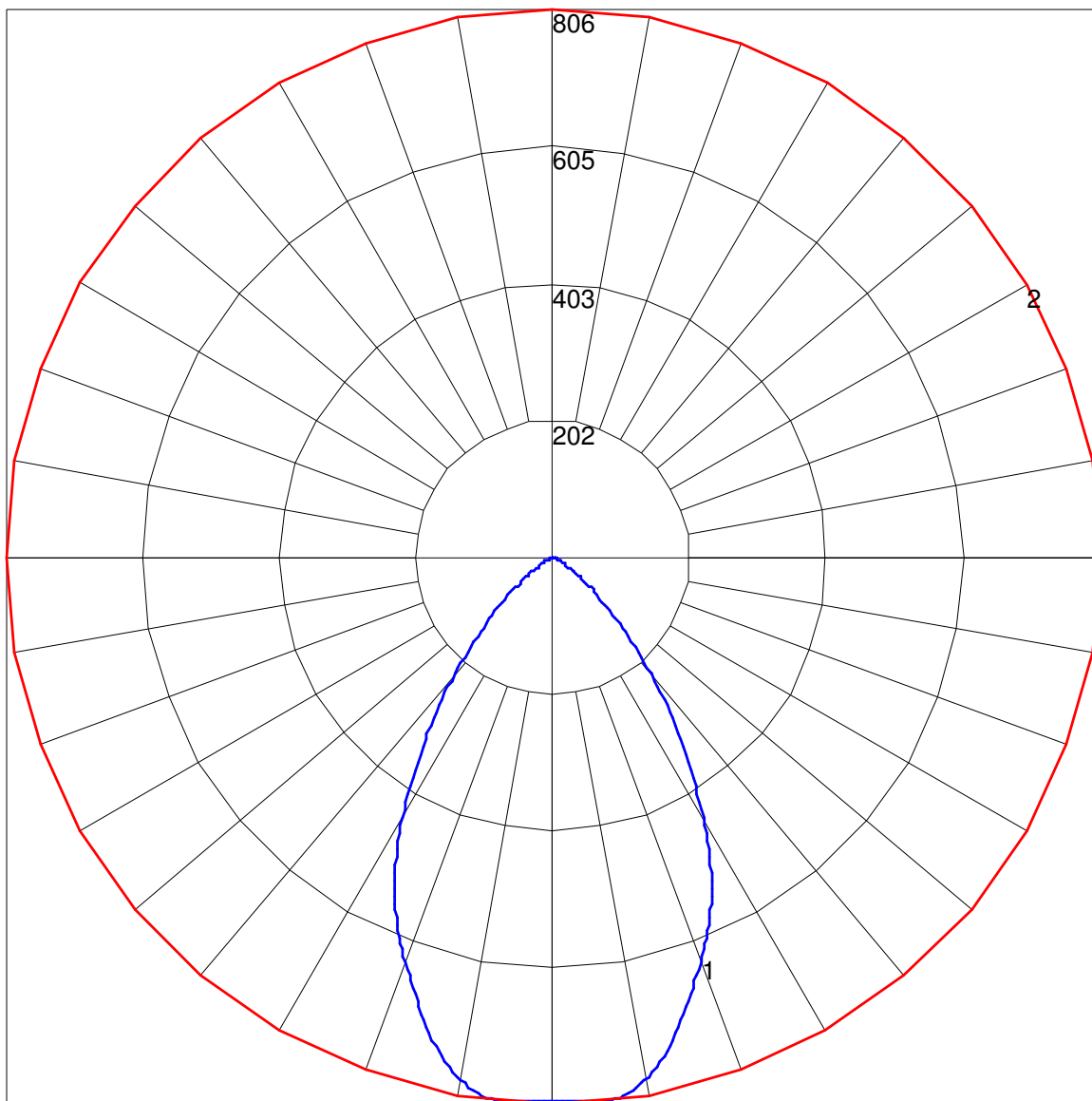
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UGR TABLE - CORRECTED

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	7.8	8.9	8.2	9.2	9.5	7.8	8.9	8.2	9.2	9.5
	3H	7.7	8.6	8.0	8.9	9.3	7.7	8.6	8.0	8.9	9.3
	4H	7.6	8.5	8.0	8.8	9.2	7.6	8.5	8.0	8.8	9.2
	6H	7.5	8.3	7.9	8.6	9.0	7.5	8.3	7.9	8.6	9.0
	8H	7.4	8.2	7.8	8.6	9.0	7.4	8.2	7.8	8.6	9.0
	12H	7.4	8.1	7.8	8.5	8.9	7.4	8.1	7.8	8.5	8.9
4H	2H	7.6	8.4	8.0	8.8	9.2	7.6	8.4	8.0	8.8	9.2
	3H	7.4	8.1	7.8	8.5	8.9	7.4	8.1	7.8	8.5	8.9
	4H	7.3	7.9	7.7	8.3	8.8	7.3	7.9	7.7	8.3	8.8
	6H	7.2	7.7	7.7	8.2	8.6	7.2	7.7	7.7	8.2	8.6
	8H	7.1	7.6	7.6	8.1	8.5	7.1	7.6	7.6	8.1	8.5
	12H	7.1	7.5	7.5	8.0	8.5	7.1	7.5	7.5	8.0	8.5
8H	4H	7.1	7.6	7.6	8.1	8.5	7.1	7.6	7.6	8.1	8.5
	6H	7.0	7.4	7.5	7.9	8.4	7.0	7.4	7.5	7.9	8.4
	8H	6.9	7.3	7.4	7.8	8.3	6.9	7.3	7.4	7.8	8.3
	12H	6.9	7.2	7.4	7.7	8.3	6.9	7.2	7.4	7.7	8.3
12H	4H	7.1	7.5	7.5	8.0	8.5	7.1	7.5	7.5	8.0	8.5
	6H	6.9	7.3	7.5	7.8	8.3	6.9	7.3	7.5	7.8	8.3
	8H	6.9	7.2	7.4	7.7	8.3	6.9	7.2	7.4	7.7	8.3

Maximum UGR = 9.5

POLAR GRAPH



Maximum Candela = 806.16 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.)