

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4LDR-L10-940-WH-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.02
[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-L10-940-WH-DIM-UNV
[LUMINAIRE] 4" recessed downlight with textured white 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	742
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	9.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	1.04
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	17737	17737	17737
55	11922	11922	11922
65	8981	8981	8981
75	6819	6819	6819
85	4988	4988	4988

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CANDELA TABULATION

	<u>0</u>
0.0	506.105
0.5	506.372
1.0	506.105
1.5	505.837
2.0	505.570
2.5	505.303
3.0	504.768
3.5	504.233
4.0	503.698
4.5	502.896
5.0	502.362
5.5	501.292
6.0	500.758
6.5	499.421
7.0	498.351
7.5	497.015
8.0	495.945
8.5	494.608
9.0	493.004
9.5	491.400
10.0	490.063
10.5	488.459
11.0	486.855
11.5	484.984
12.0	482.845
12.5	480.973
13.0	479.102
13.5	476.696
14.0	474.557
14.5	472.418
15.0	470.012
15.5	467.605
16.0	464.932
16.5	462.526
17.0	459.852
17.5	456.911
18.0	454.238
18.5	451.297
19.0	448.088
19.5	444.880
20.0	441.405
20.5	437.929
21.0	434.186
21.5	429.908
22.0	425.631
22.5	421.086
23.0	416.273
23.5	410.926
24.0	405.044
24.5	399.430
25.0	393.013
25.5	386.597
26.0	380.447
26.5	373.496

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CANDELA TABULATION - (Cont.)

27.0	366.545
27.5	359.059
28.0	351.840
28.5	344.622
29.0	337.403
29.5	330.719
30.0	323.768
30.5	316.282
31.0	308.796
31.5	301.043
32.0	293.557
32.5	286.071
33.0	278.585
33.5	271.366
34.0	263.987
34.5	256.795
35.0	249.710
35.5	242.679
36.0	235.754
36.5	228.883
37.0	222.119
37.5	215.462
38.0	208.912
38.5	202.362
39.0	195.972
39.5	189.636
40.0	183.433
40.5	177.284
41.0	171.295
41.5	165.386
42.0	159.692
42.5	154.077
43.0	148.677
43.5	143.436
44.0	138.357
44.5	133.491
45.0	128.812
45.5	124.320
46.0	120.043
46.5	115.979
47.0	112.102
47.5	108.440
48.0	104.964
48.5	101.649
49.0	98.521
49.5	95.526
50.0	92.719
50.5	90.019
51.0	87.479
51.5	85.046
52.0	82.720
52.5	80.474
53.0	78.309
53.5	76.196
54.0	74.165
54.5	72.186

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CANDELA TABULATION - (Cont.)

55.0	70.234
55.5	68.390
56.0	66.625
56.5	64.887
57.0	63.149
57.5	61.438
58.0	59.727
58.5	58.016
59.0	56.359
59.5	54.754
60.0	53.150
60.5	51.600
61.0	50.049
61.5	48.579
62.0	47.108
62.5	45.691
63.0	44.301
63.5	42.937
64.0	41.547
64.5	40.264
65.0	38.980
65.5	37.724
66.0	36.467
66.5	35.264
67.0	34.088
67.5	32.938
68.0	31.815
68.5	30.692
69.0	29.596
69.5	28.527
70.0	27.484
70.5	26.468
71.0	25.452
71.5	24.463
72.0	23.501
72.5	22.565
73.0	21.629
73.5	20.747
74.0	19.865
74.5	18.982
75.0	18.127
75.5	17.298
76.0	16.496
76.5	15.694
77.0	14.918
77.5	14.143
78.0	13.421
78.5	12.673
79.0	11.951
79.5	11.256
80.0	10.561
80.5	9.892
81.0	9.224
81.5	8.582
82.0	7.967
82.5	7.352

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CANDELA TABULATION - (Cont.)

83.0	6.737
83.5	6.149
84.0	5.588
84.5	5.000
85.0	4.465
85.5	3.930
86.0	3.395
86.5	2.887
87.0	2.379
87.5	1.898
88.0	1.444
88.5	0.989
89.0	0.588
89.5	0.267
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
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97.5	0.000
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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
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118.5	0.000
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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
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149.0	0.000
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150.0	0.000
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152.0	0.000
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158.0	0.000
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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	179.66	N.A.	24.20
0-30	358.13	N.A.	48.30
0-40	514.02	N.A.	69.30
0-60	678.71	N.A.	91.40
0-80	737.10	N.A.	99.30
0-90	742.21	N.A.	100.00
10-90	694.66	N.A.	93.60
20-40	334.36	N.A.	45.00
20-50	435.57	N.A.	58.70
40-70	203.65	N.A.	27.40
60-80	58.39	N.A.	7.90
70-80	19.43	N.A.	2.60
80-90	5.11	N.A.	0.70
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	742.21	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	47.55
10-20	132.11
20-30	178.47
30-40	155.89
40-50	101.21
50-60	63.48
60-70	38.96
70-80	19.43
80-90	5.11
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

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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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	75	72	71
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	43	39	37

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UGR TABLE - CORRECTED

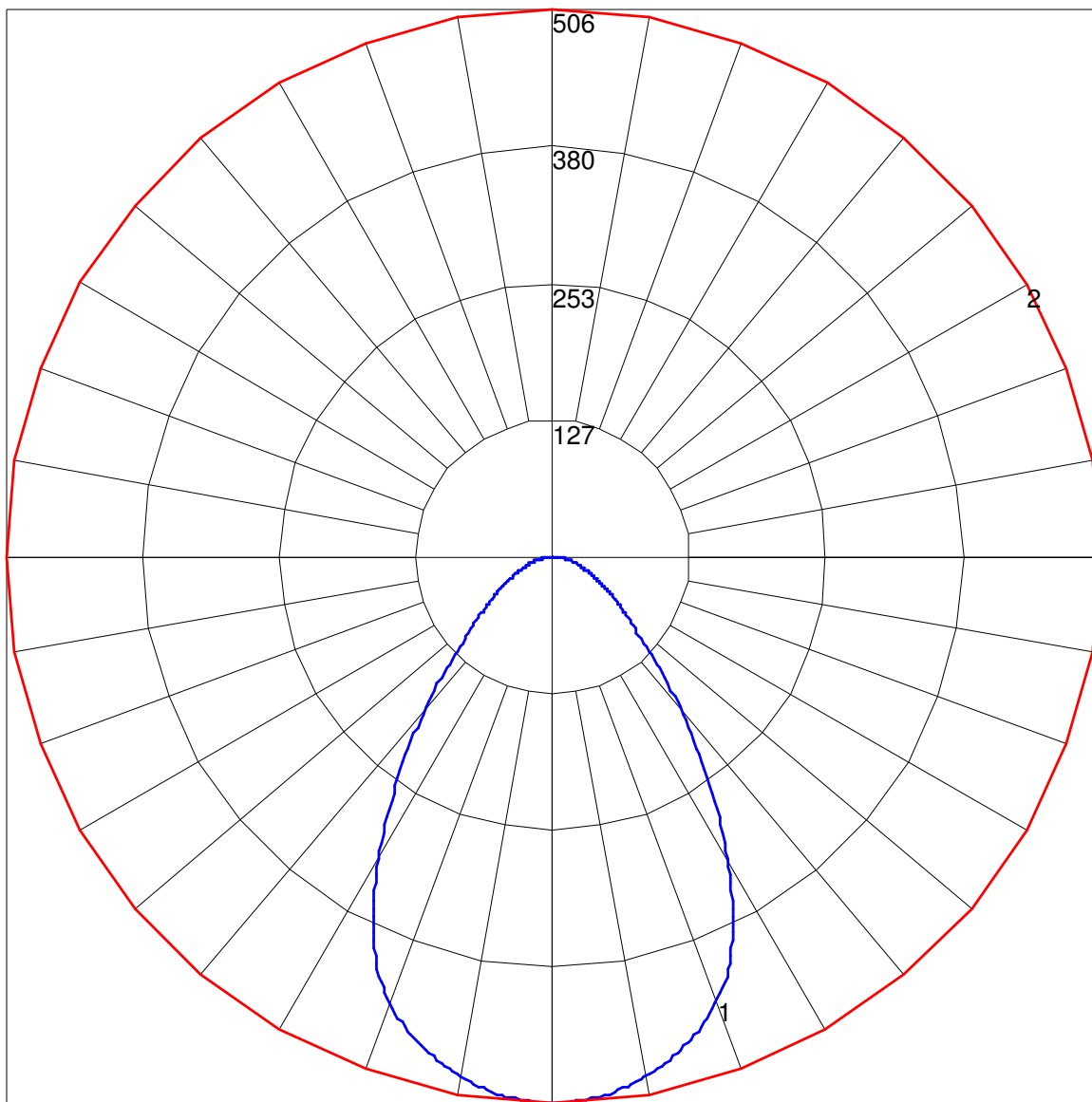
Reflectances

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	17.7	19.0	18.0	19.3	19.6	17.7	19.0	18.0	19.3	19.6
	3H	18.9	20.1	19.3	20.4	20.8	18.9	20.1	19.3	20.4	20.8
	4H	19.3	20.4	19.7	20.8	21.2	19.3	20.4	19.7	20.8	21.2
	6H	19.6	20.6	20.0	21.0	21.4	19.6	20.6	20.0	21.0	21.4
	8H	19.7	20.7	20.2	21.1	21.5	19.7	20.7	20.2	21.1	21.5
	12H	19.8	20.7	20.2	21.1	21.5	19.8	20.7	20.2	21.1	21.5
4H	2H	18.1	19.2	18.5	19.5	19.9	18.1	19.2	18.5	19.5	19.9
	3H	19.5	20.4	19.9	20.8	21.2	19.5	20.4	19.9	20.8	21.2
	4H	20.1	20.9	20.5	21.3	21.7	20.1	20.9	20.5	21.3	21.7
	6H	20.5	21.2	20.9	21.6	22.1	20.5	21.2	20.9	21.6	22.1
	8H	20.6	21.2	21.0	21.7	22.2	20.6	21.2	21.0	21.7	22.2
	12H	20.7	21.2	21.2	21.7	22.2	20.7	21.2	21.2	21.7	22.2
8H	4H	20.2	20.9	20.7	21.3	21.8	20.2	20.9	20.7	21.3	21.8
	6H	20.7	21.3	21.2	21.8	22.2	20.7	21.3	21.2	21.8	22.2
	8H	20.9	21.4	21.4	21.9	22.4	20.9	21.4	21.4	21.9	22.4
	12H	21.1	21.5	21.6	22.0	22.5	21.1	21.5	21.6	22.0	22.5
12H	4H	20.2	20.8	20.7	21.3	21.7	20.2	20.8	20.7	21.3	21.7
	6H	20.7	21.2	21.3	21.7	22.2	20.7	21.2	21.3	21.7	22.2
	8H	21.0	21.4	21.5	21.9	22.5	21.0	21.4	21.5	21.9	22.5

Maximum UGR = 22.5

POLAR GRAPH



Maximum Candela = 506.372 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.)