

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-935-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-L15-935-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	1273
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	92
Total Luminaire Watts	13.8
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	27695	27695	27695
55	8619	8619	8619
65	335	335	335
75	133	133	133
85	263	263	263

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CANDELA TABULATION

	<u>0</u>
0.0	1169.244
0.5	1169.244
1.0	1169.244
1.5	1169.636
2.0	1170.028
2.5	1170.421
3.0	1171.598
3.5	1172.382
4.0	1172.382
4.5	1173.167
5.0	1173.560
5.5	1173.167
6.0	1171.990
6.5	1170.813
7.0	1168.459
7.5	1164.928
8.0	1161.396
8.5	1157.473
9.0	1152.372
9.5	1146.879
10.0	1140.601
10.5	1133.538
11.0	1126.084
11.5	1117.452
12.0	1108.427
12.5	1099.010
13.0	1089.201
13.5	1079.000
14.0	1068.406
14.5	1057.028
15.0	1045.257
15.5	1033.093
16.0	1020.538
16.5	1008.374
17.0	996.211
17.5	984.048
18.0	972.277
18.5	960.114
19.0	948.343
19.5	937.357
20.0	925.586
20.5	914.600
21.0	903.221
21.5	891.842
22.0	880.464
22.5	868.693
23.0	856.530
23.5	843.974
24.0	831.026
24.5	817.686
25.0	803.953
25.5	789.828
26.0	775.310
26.5	760.008

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CANDELA TABULATION - (Cont.)

27.0	744.706
27.5	729.012
28.0	712.532
28.5	696.053
29.0	679.574
29.5	662.702
30.0	645.438
30.5	628.566
31.0	611.303
31.5	594.039
32.0	577.167
32.5	560.295
33.0	543.424
33.5	526.944
34.0	510.465
34.5	494.771
35.0	479.076
35.5	464.166
36.0	448.079
36.5	432.385
37.0	416.690
37.5	401.388
38.0	386.360
38.5	371.372
39.0	356.580
39.5	342.023
40.0	327.702
40.5	313.616
41.0	299.766
41.5	286.268
42.0	273.007
42.5	260.137
43.0	247.581
43.5	235.379
44.0	223.647
44.5	212.151
45.0	201.126
45.5	190.453
46.0	180.213
46.5	170.364
47.0	160.908
47.5	151.845
48.0	143.134
48.5	134.816
49.0	126.812
49.5	119.122
50.0	111.745
50.5	104.722
51.0	97.934
51.5	91.421
52.0	85.104
52.5	79.022
53.0	73.176
53.5	67.408
54.0	61.837
54.5	56.304

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CANDELA TABULATION - (Cont.)

55.0	50.772
55.5	45.161
56.0	39.511
56.5	33.979
57.0	28.721
57.5	23.816
58.0	19.344
58.5	15.302
59.0	11.732
59.5	8.750
60.0	6.435
60.5	4.748
61.0	3.610
61.5	2.982
62.0	2.550
62.5	2.276
63.0	2.040
63.5	1.883
64.0	1.726
64.5	1.569
65.0	1.452
65.5	1.334
66.0	1.256
66.5	1.177
67.0	1.059
67.5	1.020
68.0	0.942
68.5	0.863
69.0	0.824
69.5	0.745
70.0	0.706
70.5	0.667
71.0	0.628
71.5	0.589
72.0	0.549
72.5	0.510
73.0	0.471
73.5	0.432
74.0	0.432
74.5	0.392
75.0	0.353
75.5	0.353
76.0	0.314
76.5	0.314
77.0	0.314
77.5	0.275
78.0	0.275
78.5	0.235
79.0	0.235
79.5	0.235
80.0	0.235
80.5	0.235
81.0	0.235
81.5	0.235
82.0	0.235
82.5	0.196

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CANDELA TABULATION - (Cont.)

83.0	0.235
83.5	0.235
84.0	0.235
84.5	0.235
85.0	0.235
85.5	0.235
86.0	0.235
86.5	0.235
87.0	0.235
87.5	0.275
88.0	0.275
88.5	0.275
89.0	0.275
89.5	0.235
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
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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	402.68	N.A.	31.60
0-30	767.72	N.A.	60.30
0-40	1066.11	N.A.	83.70
0-60	1270.63	N.A.	99.80
0-80	1272.9	N.A.	100.00
0-90	1273.15	N.A.	100.00
10-90	1162.1	N.A.	91.30
20-40	663.43	N.A.	52.10
20-50	821.70	N.A.	64.50
40-70	206.36	N.A.	16.20
60-80	2.27	N.A.	0.20
70-80	0.42	N.A.	0.00
80-90	0.26	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	1273.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	111.06
10-20	291.63
20-30	365.04
30-40	298.39
40-50	158.26
50-60	46.25
60-70	1.84
70-80	0.42
80-90	0.26
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	108	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

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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

X=2H	Y=2H	9.1	10.2	9.5	10.5	10.8	UGR Viewed Endwise	9.1	10.2	9.5	10.5	10.8
	3H	9.0	9.9	9.3	10.2	10.6		9.0	9.9	9.3	10.2	10.6
	4H	8.9	9.8	9.3	10.1	10.5		8.9	9.8	9.3	10.1	10.5
	6H	8.8	9.6	9.2	9.9	10.3		8.8	9.6	9.2	9.9	10.3
	8H	8.7	9.5	9.2	9.9	10.3		8.7	9.5	9.2	9.9	10.3
	12H	8.7	9.4	9.1	9.8	10.2		8.7	9.4	9.1	9.8	10.2

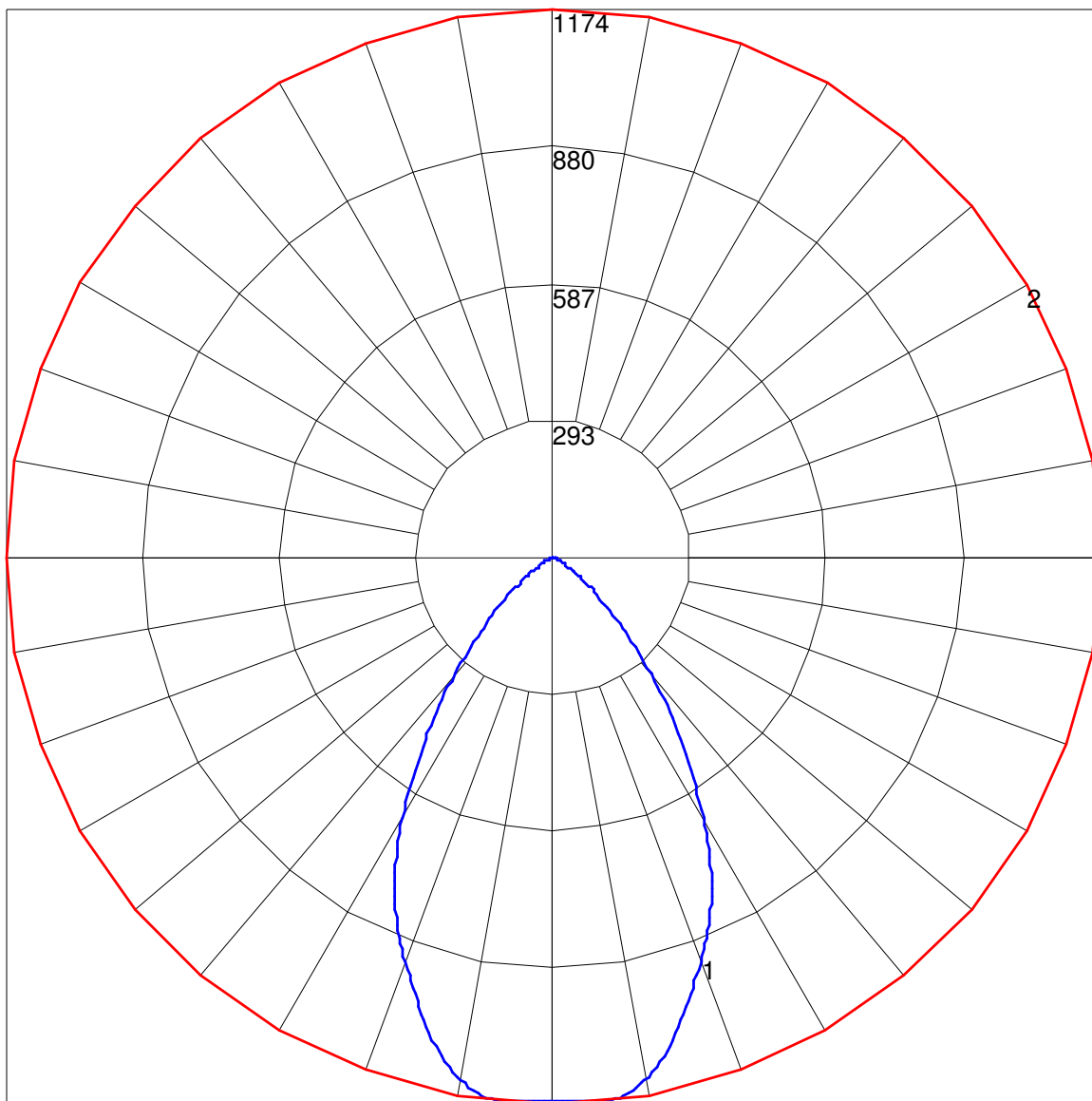
4H	2H	8.9	9.7	9.3	10.1	10.5	8.9	9.7	9.3	10.1	10.5
	3H	8.7	9.4	9.1	9.8	10.2	8.7	9.4	9.1	9.8	10.2
	4H	8.6	9.2	9.0	9.6	10.1	8.6	9.2	9.0	9.6	10.1
	6H	8.5	9.0	9.0	9.5	9.9	8.5	9.0	9.0	9.5	9.9
	8H	8.4	8.9	8.9	9.4	9.8	8.4	8.9	8.9	9.4	9.8
	12H	8.4	8.8	8.8	9.3	9.8	8.4	8.8	8.8	9.3	9.8

8H	4H	8.4	8.9	8.9	9.4	9.8	8.4	8.9	8.9	9.4	9.8
	6H	8.3	8.7	8.8	9.2	9.7	8.3	8.7	8.8	9.2	9.7
	8H	8.2	8.6	8.8	9.1	9.6	8.2	8.6	8.8	9.1	9.6
	12H	8.2	8.5	8.7	9.0	9.6	8.2	8.5	8.7	9.0	9.6

12H	4H	8.4	8.8	8.8	9.3	9.8	8.4	8.8	8.8	9.3	9.8
	6H	8.2	8.6	8.8	9.1	9.6	8.2	8.6	8.8	9.1	9.6
	8H	8.2	8.5	8.7	9.0	9.6	8.2	8.5	8.7	9.0	9.6

Maximum UGR = 10.8

POLAR GRAPH



Maximum Candela = 1173.56 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.)