

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6LDR-L20-940-BL-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.05
[TESTLAB] UL, LLC
[ISSUE DATE] 2025-12-11
[TEST DATE] 11/11/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 6LDR-L20-940-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	644
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	38
Total Luminaire Watts	17
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)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 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	4544	4544	4544
55	588	588	588
65	204	204	204
75	88	88	88
85	58	58	58

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CANDELA TABULATION

	<u>0</u>
0.0	644.140
0.5	644.140
1.0	644.140
1.5	643.677
2.0	643.213
2.5	642.750
3.0	642.286
3.5	640.896
4.0	639.969
4.5	639.043
5.0	637.652
5.5	636.725
6.0	634.872
6.5	633.482
7.0	631.628
7.5	629.774
8.0	627.921
8.5	625.604
9.0	623.287
9.5	620.970
10.0	618.652
10.5	615.872
11.0	613.092
11.5	610.311
12.0	607.067
12.5	604.287
13.0	600.580
13.5	597.799
14.0	594.092
14.5	590.848
15.0	587.141
15.5	583.433
16.0	580.189
16.5	576.482
17.0	573.702
17.5	569.994
18.0	566.287
18.5	562.580
19.0	557.946
19.5	552.848
20.0	547.751
20.5	542.653
21.0	536.629
21.5	530.605
22.0	523.653
22.5	516.702
23.0	508.824
23.5	500.483
24.0	491.215
24.5	481.483
25.0	471.751
25.5	461.556
26.0	450.898
26.5	439.915

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CANDELA TABULATION - (Cont.)

27.0	428.654
27.5	417.069
28.0	405.206
28.5	393.157
29.0	381.062
29.5	368.828
30.0	356.640
30.5	344.360
31.0	332.033
31.5	319.753
32.0	307.565
32.5	295.470
33.0	283.514
33.5	271.790
34.0	260.251
34.5	248.805
35.0	237.637
35.5	226.654
36.0	215.856
36.5	205.152
37.0	194.725
37.5	184.437
38.0	174.381
38.5	164.511
39.0	154.779
39.5	145.186
40.0	135.872
40.5	126.789
41.0	117.938
41.5	109.365
42.0	101.070
42.5	93.053
43.0	85.453
43.5	78.177
44.0	71.272
44.5	64.785
45.0	58.668
45.5	52.921
46.0	47.592
46.5	42.680
47.0	38.185
47.5	34.061
48.0	30.307
48.5	26.878
49.0	23.819
49.5	21.085
50.0	18.629
50.5	16.451
51.0	14.551
51.5	12.929
52.0	11.493
52.5	10.241
53.0	9.176
53.5	8.249
54.0	7.461
54.5	6.766

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CANDELA TABULATION - (Cont.)

55.0	6.163
55.5	5.700
56.0	5.283
56.5	4.958
57.0	4.680
57.5	4.402
58.0	4.124
58.5	3.846
59.0	3.615
59.5	3.337
60.0	3.151
60.5	2.919
61.0	2.734
61.5	2.549
62.0	2.363
62.5	2.224
63.0	2.085
63.5	1.946
64.0	1.807
64.5	1.715
65.0	1.576
65.5	1.483
66.0	1.390
66.5	1.298
67.0	1.205
67.5	1.159
68.0	1.066
68.5	1.020
69.0	0.927
69.5	0.880
70.0	0.834
70.5	0.788
71.0	0.741
71.5	0.695
72.0	0.649
72.5	0.602
73.0	0.556
73.5	0.556
74.0	0.510
74.5	0.463
75.0	0.417
75.5	0.417
76.0	0.371
76.5	0.371
77.0	0.324
77.5	0.324
78.0	0.278
78.5	0.278
79.0	0.278
79.5	0.232
80.0	0.232
80.5	0.185
81.0	0.185
81.5	0.185
82.0	0.185
82.5	0.139

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CANDELA TABULATION - (Cont.)

83.0	0.139
83.5	0.139
84.0	0.093
84.5	0.093
85.0	0.093
85.5	0.093
86.0	0.093
86.5	0.046
87.0	0.046
87.5	0.046
88.0	0.046
88.5	0.046
89.0	0.046
89.5	0.046
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	225.43	N.A.	35.00
0-30	437.91	N.A.	68.00
0-40	586.20	N.A.	91.00
0-60	642.06	N.A.	99.60
0-80	644.25	N.A.	100.00
0-90	644.36	N.A.	100.00
10-90	584.09	N.A.	90.60
20-40	360.77	N.A.	56.00
20-50	409.84	N.A.	63.60
40-70	57.55	N.A.	8.90
60-80	2.18	N.A.	0.30
70-80	0.49	N.A.	0.10
80-90	0.11	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	644.36	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	60.27
10-20	165.16
20-30	212.48
30-40	148.29
40-50	49.06
50-60	6.80
60-70	1.69
70-80	0.49
80-90	0.11
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

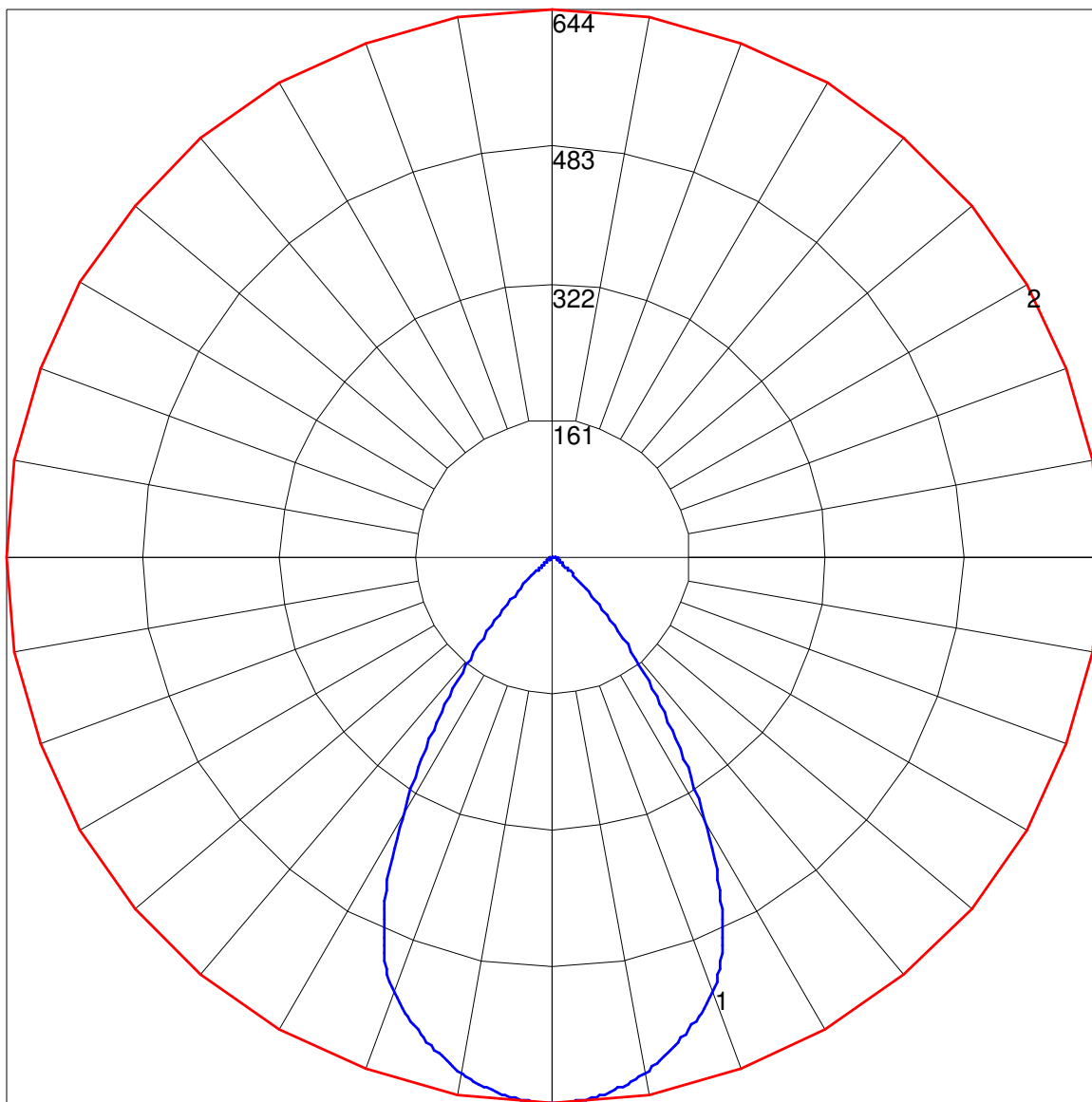
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	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	87
3	102	96	90	86	100	94	89	86	92	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	67	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

POLAR GRAPH



Maximum Candela = 644.14 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.)