

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6LDR-L20-830-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-L20-830-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	742
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	44
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	5231	5231	5231
55	677	677	677
65	235	235	235
75	102	102	102
85	67	67	67

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CANDELA TABULATION

	<u>0</u>
0.0	741.510
0.5	741.510
1.0	741.510
1.5	740.976
2.0	740.443
2.5	739.910
3.0	739.376
3.5	737.776
4.0	736.709
4.5	735.642
5.0	734.041
5.5	732.975
6.0	730.841
6.5	729.240
7.0	727.106
7.5	724.973
8.0	722.839
8.5	720.172
9.0	717.504
9.5	714.837
10.0	712.170
10.5	708.969
11.0	705.768
11.5	702.567
12.0	698.833
12.5	695.632
13.0	691.365
13.5	688.164
14.0	683.896
14.5	680.162
15.0	675.894
15.5	671.627
16.0	667.892
16.5	663.625
17.0	660.424
17.5	656.156
18.0	651.889
18.5	647.621
19.0	642.286
19.5	636.418
20.0	630.550
20.5	624.682
21.0	617.747
21.5	610.812
22.0	602.810
22.5	594.808
23.0	585.739
23.5	576.137
24.0	565.468
24.5	554.265
25.0	543.063
25.5	531.327
26.0	519.057
26.5	506.414

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**CANDELA TABULATION - (Cont.)**

27.0	493.451
27.5	480.114
28.0	466.458
28.5	452.588
29.0	438.664
29.5	424.581
30.0	410.551
30.5	396.414
31.0	382.224
31.5	368.088
32.0	354.058
32.5	340.134
33.0	326.371
33.5	312.875
34.0	299.591
34.5	286.415
35.0	273.558
35.5	260.915
36.0	248.486
36.5	236.163
37.0	224.160
37.5	212.317
38.0	200.741
38.5	189.378
39.0	178.176
39.5	167.133
40.0	156.411
40.5	145.955
41.0	135.766
41.5	125.897
42.0	116.348
42.5	107.119
43.0	98.370
43.5	89.995
44.0	82.046
44.5	74.578
45.0	67.536
45.5	60.921
46.0	54.786
46.5	49.132
47.0	43.957
47.5	39.209
48.0	34.888
48.5	30.941
49.0	27.420
49.5	24.272
50.0	21.445
50.5	18.938
51.0	16.751
51.5	14.884
52.0	13.230
52.5	11.789
53.0	10.563
53.5	9.496
54.0	8.589
54.5	7.789

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CANDELA TABULATION - (Cont.)

55.0	7.095
55.5	6.562
56.0	6.081
56.5	5.708
57.0	5.388
57.5	5.068
58.0	4.748
58.5	4.428
59.0	4.161
59.5	3.841
60.0	3.628
60.5	3.361
61.0	3.147
61.5	2.934
62.0	2.721
62.5	2.561
63.0	2.401
63.5	2.241
64.0	2.080
64.5	1.974
65.0	1.814
65.5	1.707
66.0	1.600
66.5	1.494
67.0	1.387
67.5	1.334
68.0	1.227
68.5	1.174
69.0	1.067
69.5	1.014
70.0	0.960
70.5	0.907
71.0	0.854
71.5	0.800
72.0	0.747
72.5	0.693
73.0	0.640
73.5	0.640
74.0	0.587
74.5	0.533
75.0	0.480
75.5	0.480
76.0	0.427
76.5	0.427
77.0	0.373
77.5	0.373
78.0	0.320
78.5	0.320
79.0	0.320
79.5	0.267
80.0	0.267
80.5	0.213
81.0	0.213
81.5	0.213
82.0	0.213
82.5	0.160

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CANDELA TABULATION - (Cont.)

83.0	0.160
83.5	0.160
84.0	0.107
84.5	0.107
85.0	0.107
85.5	0.107
86.0	0.107
86.5	0.053
87.0	0.053
87.5	0.053
88.0	0.053
88.5	0.053
89.0	0.053
89.5	0.053
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
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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	259.51	N.A.	35.00
0-30	504.11	N.A.	68.00
0-40	674.82	N.A.	91.00
0-60	739.12	N.A.	99.60
0-80	741.63	N.A.	100.00
0-90	741.76	N.A.	100.00
10-90	672.38	N.A.	90.60
20-40	415.31	N.A.	56.00
20-50	471.79	N.A.	63.60
40-70	66.25	N.A.	8.90
60-80	2.51	N.A.	0.30
70-80	0.57	N.A.	0.10
80-90	0.13	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	741.76	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	69.38
10-20	190.12
20-30	244.60
30-40	170.71
40-50	56.48
50-60	7.83
60-70	1.94
70-80	0.57
80-90	0.13
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	86
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80
4	97	89	83	79	95	88	83	78	86	81	78	84	80	77	82	78	76	74
5	92	83	77	73	90	82	76	72	80	75	72	79	74	71	77	73	70	69
6	87	78	72	67	85	77	71	67	75	70	66	74	69	66	73	69	66	64
7	82	73	67	62	81	72	66	62	71	66	62	70	65	61	68	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	53	50	49

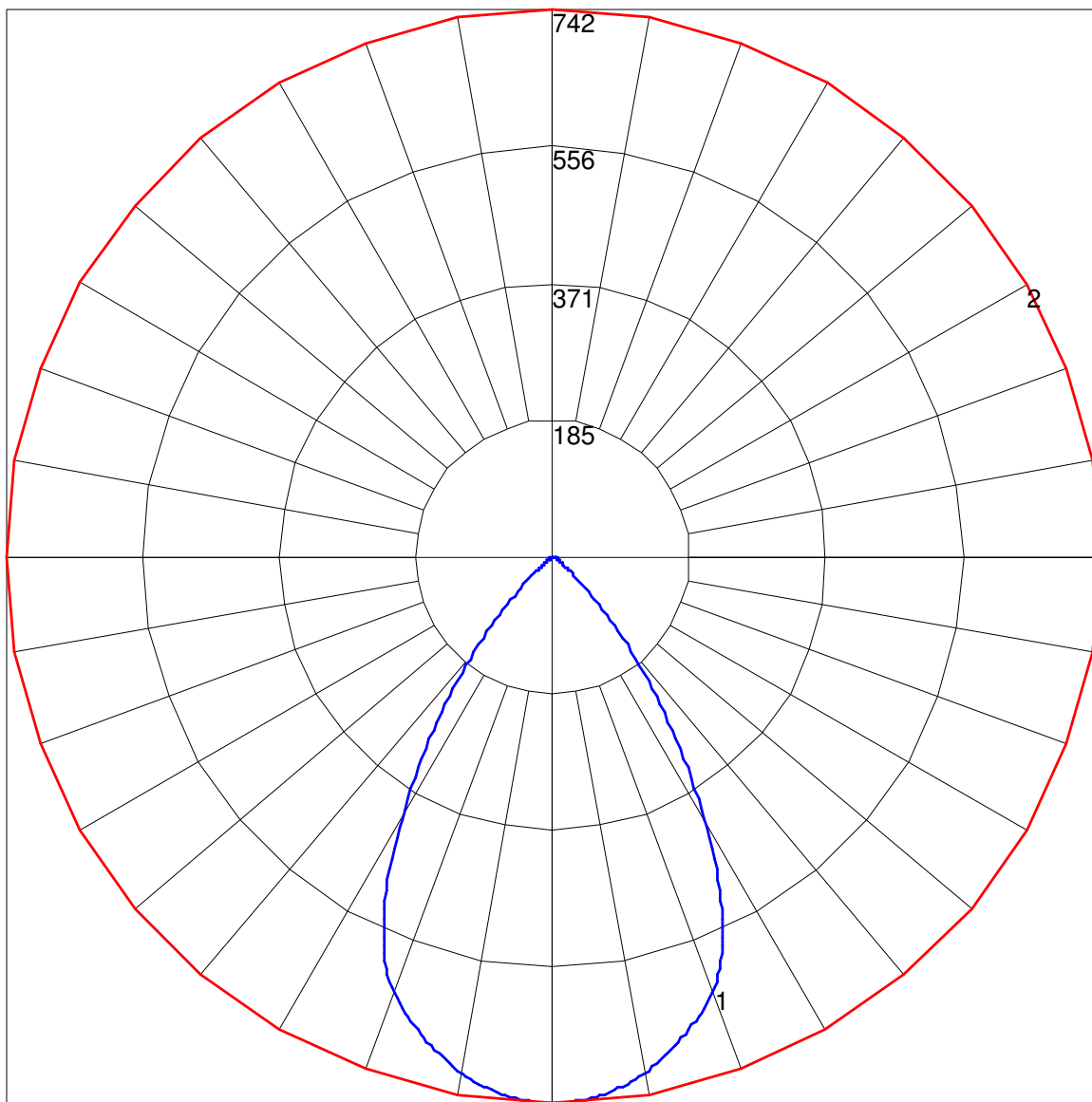
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**UGR TABLE - CORRECTED**

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	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
	3H	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.1	0.4
	4H	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.4
	6H	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
	8H	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
	12H	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
4H	2H	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
	3H	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
	4H	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
	6H	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
	8H	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
	12H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
8H	4H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	6H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	8H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	12H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
12H	4H	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
	6H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Maximum UGR = 0.4

POLAR GRAPH



Maximum Candela = 741.51 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.)