

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6LDR-L20-835-CS-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.03
[TESTLAB] UL, LLC
[ISSUE DATE] 2025-12-11
[TEST DATE] 11/12/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 6LDR-L20-835-CS-DIM-UNV
[LUMINAIRE] 6" 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	2040
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	17
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.86
Spacing Criterion (90-270)	0.86
Spacing Criterion (Diagonal)	0.90
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	20411	20411	20411
55	2236	2236	2236
65	248	248	248
75	91	91	91
85	77	77	77

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CANDELA TABULATION

	<u>0</u>
0.0	2251.332
0.5	2251.332
1.0	2251.332
1.5	2252.564
2.0	2253.797
2.5	2255.029
3.0	2256.261
3.5	2256.877
4.0	2255.645
4.5	2253.180
5.0	2248.251
5.5	2241.474
6.0	2231.616
6.5	2220.526
7.0	2206.971
7.5	2192.184
8.0	2172.468
8.5	2153.368
9.0	2131.187
9.5	2105.926
10.0	2080.665
10.5	2052.939
11.0	2023.365
11.5	1991.326
12.0	1961.752
12.5	1929.713
13.0	1895.826
13.5	1868.716
14.0	1837.294
14.5	1807.104
15.0	1779.994
15.5	1754.733
16.0	1726.391
16.5	1705.443
17.0	1682.646
17.5	1659.849
18.0	1639.517
18.5	1617.336
19.0	1597.620
19.5	1578.520
20.0	1559.420
20.5	1540.320
21.0	1521.220
21.5	1502.120
22.0	1483.020
22.5	1462.072
23.0	1442.356
23.5	1421.407
24.0	1399.843
24.5	1377.662
25.0	1354.250
25.5	1329.604
26.0	1304.343
26.5	1277.234

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CANDELA TABULATION - (Cont.)

27.0	1249.508
27.5	1221.166
28.0	1190.976
28.5	1160.785
29.0	1129.363
29.5	1098.556
30.0	1065.902
30.5	1033.863
31.0	1001.208
31.5	969.169
32.0	936.515
32.5	903.860
33.0	871.821
33.5	840.399
34.0	808.360
34.5	777.554
35.0	749.828
35.5	720.254
36.0	690.680
36.5	661.722
37.0	632.764
37.5	604.237
38.0	576.388
38.5	549.032
39.0	522.292
39.5	496.168
40.0	470.660
40.5	446.077
41.0	422.048
41.5	399.005
42.0	376.762
42.5	355.506
43.0	335.174
43.5	315.889
44.0	297.405
44.5	280.030
45.0	263.518
45.5	247.807
46.0	232.896
46.5	218.664
47.0	205.047
47.5	191.986
48.0	179.416
48.5	167.217
49.0	155.203
49.5	143.435
50.0	131.790
50.5	120.207
51.0	108.685
51.5	97.040
52.0	85.457
52.5	73.689
53.0	62.044
53.5	50.831
54.0	40.418
54.5	31.238

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CANDELA TABULATION - (Cont.)

55.0	23.413
55.5	17.375
56.0	13.124
56.5	10.289
57.0	8.503
57.5	7.270
58.0	6.346
58.5	5.668
59.0	5.114
59.5	4.621
60.0	4.190
60.5	3.882
61.0	3.512
61.5	3.265
62.0	3.019
62.5	2.773
63.0	2.526
63.5	2.341
64.0	2.218
64.5	2.033
65.0	1.910
65.5	1.725
66.0	1.664
66.5	1.540
67.0	1.417
67.5	1.294
68.0	1.232
68.5	1.109
69.0	1.047
69.5	0.986
70.0	0.924
70.5	0.863
71.0	0.801
71.5	0.739
72.0	0.678
72.5	0.616
73.0	0.555
73.5	0.555
74.0	0.493
74.5	0.493
75.0	0.431
75.5	0.431
76.0	0.370
76.5	0.370
77.0	0.308
77.5	0.308
78.0	0.308
78.5	0.246
79.0	0.246
79.5	0.246
80.0	0.185
80.5	0.185
81.0	0.185
81.5	0.185
82.0	0.185
82.5	0.123

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CANDELA TABULATION - (Cont.)

83.0	0.123
83.5	0.123
84.0	0.123
84.5	0.123
85.0	0.123
85.5	0.123
86.0	0.062
86.5	0.062
87.0	0.062
87.5	0.062
88.0	0.062
88.5	0.062
89.0	0.062
89.5	0.062
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
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120.0	0.000
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121.0	0.000
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122.0	0.000
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124.5	0.000
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125.5	0.000
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126.5	0.000
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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
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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	710.44	N.A.	34.80
0-30	1323.14	N.A.	64.90
0-40	1790.09	N.A.	87.80
0-60	2037.09	N.A.	99.90
0-80	2039.67	N.A.	100.00
0-90	2039.79	N.A.	100.00
10-90	1830.44	N.A.	89.70
20-40	1079.66	N.A.	52.90
20-50	1290.21	N.A.	63.30
40-70	249.07	N.A.	12.20
60-80	2.57	N.A.	0.10
70-80	0.51	N.A.	0.00
80-90	0.12	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	2039.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	209.35
10-20	501.09
20-30	612.71
30-40	466.95
40-50	210.55
50-60	36.45
60-70	2.07
70-80	0.51
80-90	0.12
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	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	84	81	80
4	96	88	83	78	94	87	82	78	85	81	77	83	79	76	81	78	75	74
5	91	82	76	72	89	81	76	72	80	75	71	78	74	70	76	73	70	68
6	86	77	71	66	85	76	70	66	75	70	66	73	69	65	72	68	65	63
7	82	72	66	62	80	71	66	61	70	65	61	69	64	61	68	64	60	59
8	78	68	61	57	76	67	61	57	66	61	57	65	60	57	64	60	56	55
9	74	64	58	53	73	63	57	53	62	57	53	61	56	53	60	56	53	51
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	50	48

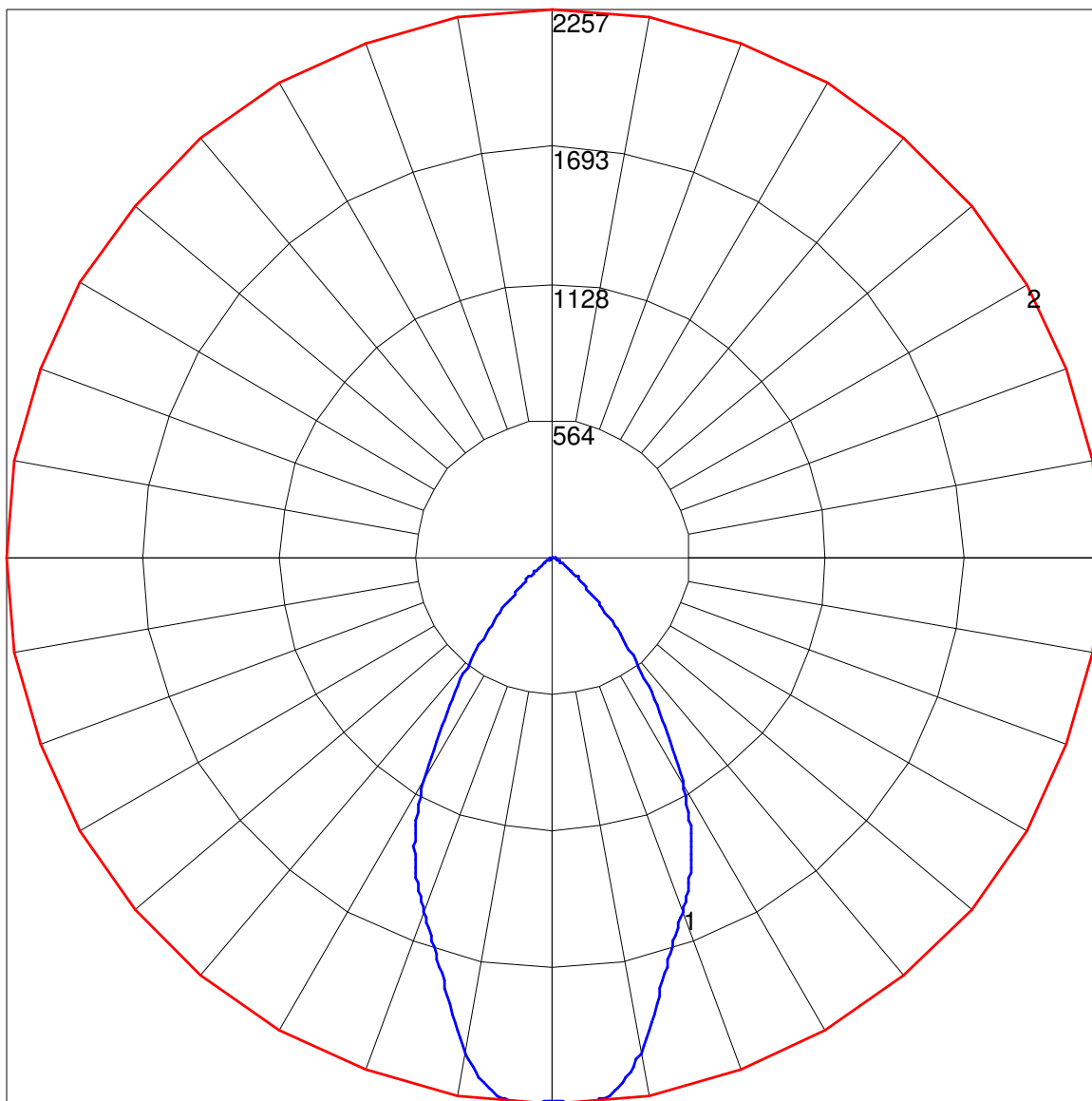
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UGR TABLE - CORRECTED

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	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	3H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	4H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	6H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	8H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	12H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
4H	2H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	3H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	4H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	6H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	8H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	12H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
8H	4H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	6H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	8H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	12H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
12H	4H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	6H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	8H	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Maximum UGR = 2.5

POLAR GRAPH



Maximum Candela = 2256.877 Located At Horizontal Angle = 0, Vertical Angle = 3.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (3.5) (Through Max. Cd.)