

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.04
[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-WH-DIM-UNV
[LUMINAIRE] 6" 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	1748
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	103
Total Luminaire Watts	17
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.06
Spacing Criterion (90-270)	1.06
Spacing Criterion (Diagonal)	1.02
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	21077	21077	21077
55	15524	15524	15524
65	11665	11665	11665
75	8841	8841	8841
85	6448	6448	6448

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CANDELA TABULATION

	<u>0</u>
0.0	1231.894
0.5	1231.894
1.0	1231.280
1.5	1230.666
2.0	1229.437
2.5	1229.437
3.0	1227.594
3.5	1226.365
4.0	1223.907
4.5	1222.064
5.0	1220.221
5.5	1217.763
6.0	1214.691
6.5	1212.233
7.0	1209.161
7.5	1205.475
8.0	1201.788
8.5	1198.102
9.0	1194.415
9.5	1190.114
10.0	1185.814
10.5	1180.898
11.0	1175.983
11.5	1171.068
12.0	1166.152
12.5	1160.623
13.0	1155.093
13.5	1148.949
14.0	1143.419
14.5	1136.661
15.0	1131.131
15.5	1124.372
16.0	1117.614
16.5	1111.470
17.0	1104.097
17.5	1097.338
18.0	1089.965
18.5	1082.592
19.0	1075.220
19.5	1067.847
20.0	1059.245
20.5	1051.872
21.0	1043.885
21.5	1035.897
22.0	1027.295
22.5	1018.694
23.0	1009.478
23.5	999.647
24.0	989.202
24.5	978.143
25.0	966.469
25.5	954.181
26.0	940.049
26.5	925.303

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CANDELA TABULATION - (Cont.)

27.0	909.329
27.5	892.739
28.0	874.922
28.5	856.489
29.0	837.442
29.5	817.167
30.0	796.891
30.5	777.845
31.0	756.955
31.5	736.679
32.0	715.789
32.5	694.285
33.0	672.780
33.5	651.890
34.0	631.000
34.5	610.110
35.0	589.589
35.5	569.436
36.0	549.714
36.5	530.114
37.0	511.006
37.5	492.082
38.0	473.588
38.5	455.402
39.0	437.522
39.5	420.196
40.0	403.299
40.5	386.895
41.0	371.166
41.5	356.113
42.0	341.735
42.5	328.157
43.0	315.316
43.5	303.273
44.0	292.091
44.5	281.708
45.0	272.123
45.5	263.214
46.0	255.104
46.5	247.485
47.0	240.542
47.5	234.152
48.0	228.069
48.5	222.478
49.0	217.071
49.5	211.910
50.0	206.995
50.5	202.141
51.0	197.410
51.5	192.741
52.0	188.194
52.5	183.832
53.0	179.470
53.5	175.230
54.0	170.991
54.5	166.751

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PHOTOMETRIC FILENAME : 6LDR-L20-835-WH-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

55.0	162.573
55.5	158.395
56.0	154.156
56.5	150.101
57.0	146.046
57.5	142.052
58.0	138.120
58.5	134.249
59.0	130.439
59.5	126.753
60.0	123.067
60.5	119.503
61.0	115.939
61.5	112.499
62.0	109.119
62.5	105.740
63.0	102.484
63.5	99.289
64.0	96.094
64.5	93.022
65.0	90.011
65.5	87.124
66.0	84.236
66.5	81.409
67.0	78.645
67.5	75.941
68.0	73.299
68.5	70.780
69.0	68.200
69.5	65.742
70.0	63.346
70.5	60.950
71.0	58.676
71.5	56.342
72.0	54.130
72.5	51.979
73.0	49.829
73.5	47.801
74.0	45.774
74.5	43.746
75.0	41.780
75.5	39.875
76.0	38.032
76.5	36.189
77.0	34.407
77.5	32.625
78.0	30.905
78.5	29.185
79.0	27.526
79.5	25.928
80.0	24.331
80.5	22.795
81.0	21.259
81.5	19.784
82.0	18.309
82.5	16.896

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PHOTOMETRIC FILENAME : 6LDR-L20-835-WH-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

83.0	15.483
83.5	14.131
84.0	12.780
84.5	11.489
85.0	10.261
85.5	9.032
86.0	7.803
86.5	6.636
87.0	5.468
87.5	4.362
88.0	3.256
88.5	2.212
89.0	1.290
89.5	0.676
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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PHOTOMETRIC FILENAME : 6LDR-L20-835-WH-DIM-UNV_.IES

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
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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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PHOTOMETRIC FILENAME : 6LDR-L20-835-WH-DIM-UNV_.IES

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
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146.5	0.000
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157.0	0.000
157.5	0.000
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159.0	0.000
159.5	0.000
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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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PHOTOMETRIC FILENAME : 6LDR-L20-835-WH-DIM-UNV_.IES

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	433.22	N.A.	24.80
0-30	870.54	N.A.	49.80
0-40	1238.36	N.A.	70.80
0-60	1601.58	N.A.	91.60
0-80	1736.39	N.A.	99.30
0-90	1748.15	N.A.	100.00
10-90	1632.78	N.A.	93.40
20-40	805.14	N.A.	46.10
20-50	1022.67	N.A.	58.50
40-70	453.26	N.A.	25.90
60-80	134.81	N.A.	7.70
70-80	44.78	N.A.	2.60
80-90	11.75	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	1748.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	115.37
10-20	317.86
20-30	437.32
30-40	367.82
40-50	217.53
50-60	145.68
60-70	90.04
70-80	44.78
80-90	11.75
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	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	89	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	39	38

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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	18.6	19.9	18.9	20.2	20.5	18.6	19.9	18.9	20.2	20.5
	3H	19.8	21.0	20.2	21.3	21.7	19.8	21.0	20.2	21.3	21.7
	4H	20.2	21.3	20.6	21.7	22.0	20.2	21.3	20.6	21.7	22.0
	6H	20.5	21.5	20.9	21.9	22.3	20.5	21.5	20.9	21.9	22.3
	8H	20.6	21.5	21.0	21.9	22.3	20.6	21.5	21.0	21.9	22.3
	12H	20.6	21.5	21.1	21.9	22.4	20.6	21.5	21.1	21.9	22.4

UGR Viewed Endwise

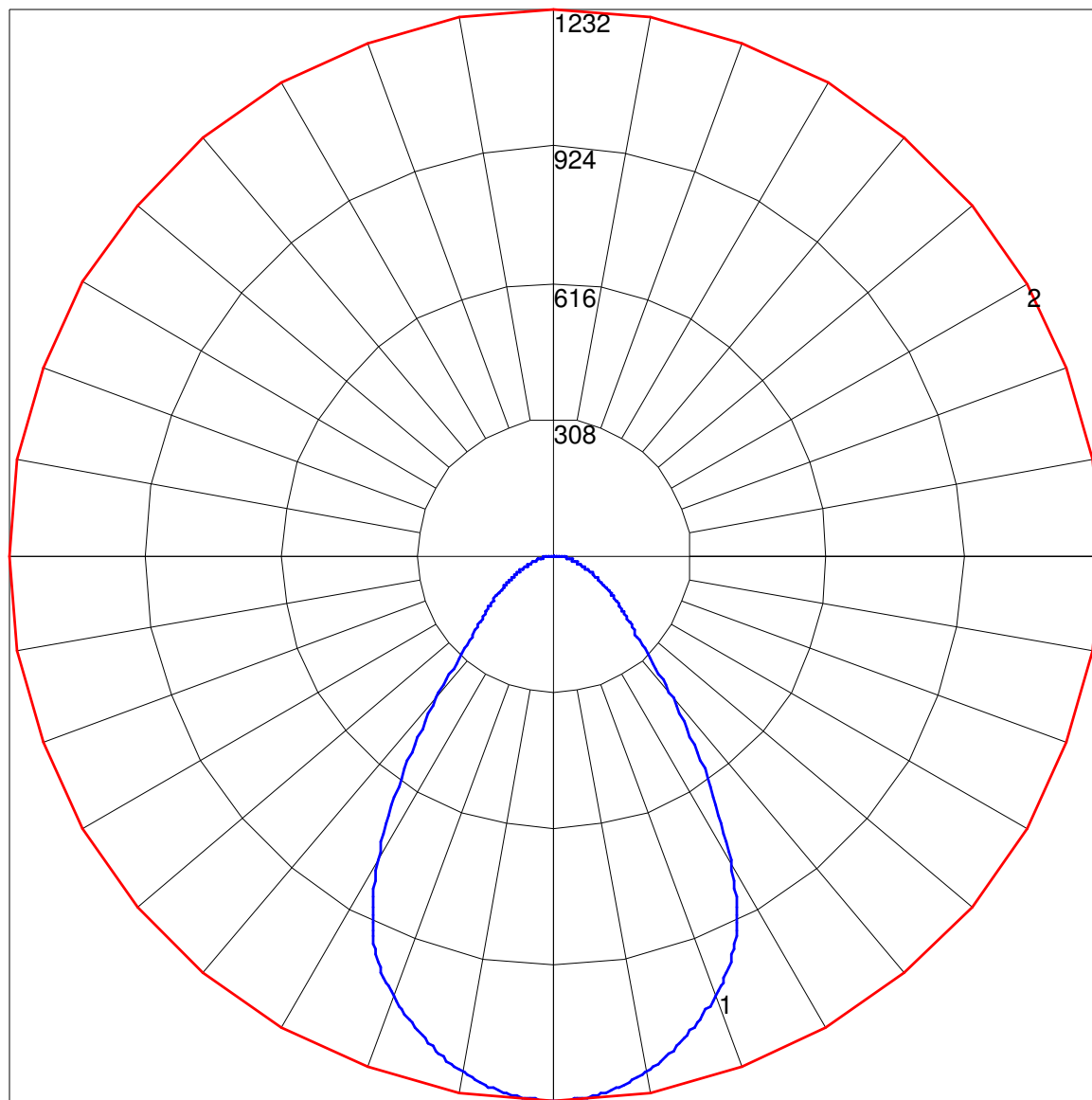
4H	2H	19.0	20.1	19.4	20.4	20.8	19.0	20.1	19.4	20.4	20.8
	3H	20.4	21.3	20.8	21.7	22.1	20.4	21.3	20.8	21.7	22.1
	4H	20.9	21.7	21.3	22.1	22.6	20.9	21.7	21.3	22.1	22.6
	6H	21.3	22.0	21.8	22.5	22.9	21.3	22.0	21.8	22.5	22.9
	8H	21.5	22.1	21.9	22.5	23.0	21.5	22.1	21.9	22.5	23.0
	12H	21.5	22.1	22.0	22.6	23.1	21.5	22.1	22.0	22.6	23.1

8H	4H	21.1	21.7	21.6	22.2	22.7	21.1	21.7	21.6	22.2	22.7
	6H	21.6	22.1	22.1	22.6	23.1	21.6	22.1	22.1	22.6	23.1
	8H	21.8	22.2	22.3	22.8	23.2	21.8	22.2	22.3	22.8	23.2
	12H	21.9	22.3	22.4	22.8	23.4	21.9	22.3	22.4	22.8	23.4

12H	4H	21.1	21.7	21.6	22.1	22.6	21.1	21.7	21.6	22.1	22.6
	6H	21.6	22.1	22.1	22.6	23.1	21.6	22.1	22.1	22.6	23.1
	8H	21.8	22.2	22.3	22.7	23.3	21.8	22.2	22.3	22.7	23.3

Maximum UGR = 23.4

POLAR GRAPH



Maximum Candela = 1231.894 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.)