

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6LDR-L20-840-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-L20-840-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	1801
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
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	21710	21710	21710
55	15989	15989	15989
65	12015	12015	12015
75	9106	9106	9106
85	6641	6641	6641

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CANDELA TABULATION

	<u>0</u>
0.0	1268.851
0.5	1268.851
1.0	1268.219
1.5	1267.586
2.0	1266.320
2.5	1266.320
3.0	1264.422
3.5	1263.156
4.0	1260.624
4.5	1258.726
5.0	1256.827
5.5	1254.296
6.0	1251.132
6.5	1248.600
7.0	1245.436
7.5	1241.639
8.0	1237.842
8.5	1234.045
9.0	1230.248
9.5	1225.818
10.0	1221.388
10.5	1216.325
11.0	1211.263
11.5	1206.200
12.0	1201.137
12.5	1195.442
13.0	1189.746
13.5	1183.418
14.0	1177.722
14.5	1170.761
15.0	1165.065
15.5	1158.104
16.0	1151.143
16.5	1144.814
17.0	1137.220
17.5	1130.259
18.0	1122.665
18.5	1115.070
19.0	1107.476
19.5	1099.882
20.0	1091.022
20.5	1083.428
21.0	1075.201
21.5	1066.974
22.0	1058.115
22.5	1049.255
23.0	1039.762
23.5	1029.637
24.0	1018.878
24.5	1007.487
25.0	995.463
25.5	982.806
26.0	968.251
26.5	953.062

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**CANDELA TABULATION - (Cont.)**

27.0	936.609
27.5	919.522
28.0	901.169
28.5	882.184
29.0	862.566
29.5	841.682
30.0	820.798
30.5	801.180
31.0	779.663
31.5	758.779
32.0	737.263
32.5	715.113
33.0	692.964
33.5	671.447
34.0	649.930
34.5	628.414
35.0	607.277
35.5	586.519
36.0	566.205
36.5	546.017
37.0	526.336
37.5	506.844
38.0	487.796
38.5	469.064
39.0	450.648
39.5	432.802
40.0	415.399
40.5	398.502
41.0	382.301
41.5	366.796
42.0	351.988
42.5	338.002
43.0	324.775
43.5	312.372
44.0	300.854
44.5	290.159
45.0	280.286
45.5	271.110
46.0	262.757
46.5	254.909
47.0	247.758
47.5	241.177
48.0	234.912
48.5	229.153
49.0	223.584
49.5	218.268
50.0	213.205
50.5	208.206
51.0	203.333
51.5	198.523
52.0	193.840
52.5	189.347
53.0	184.854
53.5	180.487
54.0	176.120
54.5	171.754

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CANDELA TABULATION - (Cont.)

55.0	167.450
55.5	163.147
56.0	158.780
56.5	154.604
57.0	150.427
57.5	146.313
58.0	142.263
58.5	138.276
59.0	134.353
59.5	130.556
60.0	126.759
60.5	123.088
61.0	119.418
61.5	115.874
62.0	112.393
62.5	108.912
63.0	105.558
63.5	102.268
64.0	98.977
64.5	95.813
65.0	92.712
65.5	89.737
66.0	86.763
66.5	83.852
67.0	81.004
67.5	78.219
68.0	75.498
68.5	72.904
69.0	70.246
69.5	67.714
70.0	65.246
70.5	62.778
71.0	60.437
71.5	58.032
72.0	55.754
72.5	53.539
73.0	51.324
73.5	49.235
74.0	47.147
74.5	45.058
75.0	43.033
75.5	41.072
76.0	39.173
76.5	37.274
77.0	35.439
77.5	33.604
78.0	31.832
78.5	30.060
79.0	28.351
79.5	26.706
80.0	25.061
80.5	23.478
81.0	21.896
81.5	20.378
82.0	18.859
82.5	17.403

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CANDELA TABULATION - (Cont.)

83.0	15.948
83.5	14.555
84.0	13.163
84.5	11.834
85.0	10.568
85.5	9.303
86.0	8.037
86.5	6.835
87.0	5.632
87.5	4.493
88.0	3.354
88.5	2.278
89.0	1.329
89.5	0.696
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
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134.5	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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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
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146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
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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	446.22	N.A.	24.80
0-30	896.66	N.A.	49.80
0-40	1275.51	N.A.	70.80
0-60	1649.63	N.A.	91.60
0-80	1788.48	N.A.	99.30
0-90	1800.59	N.A.	100.00
10-90	1681.76	N.A.	93.40
20-40	829.30	N.A.	46.10
20-50	1053.35	N.A.	58.50
40-70	466.85	N.A.	25.90
60-80	138.86	N.A.	7.70
70-80	46.12	N.A.	2.60
80-90	12.11	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	1800.59	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	118.83
10-20	327.39
20-30	450.44
30-40	378.85
40-50	224.06
50-60	150.05
60-70	92.74
70-80	46.12
80-90	12.11
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	111	108	105	102	109	106	103	100	101	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	69	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	42	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**

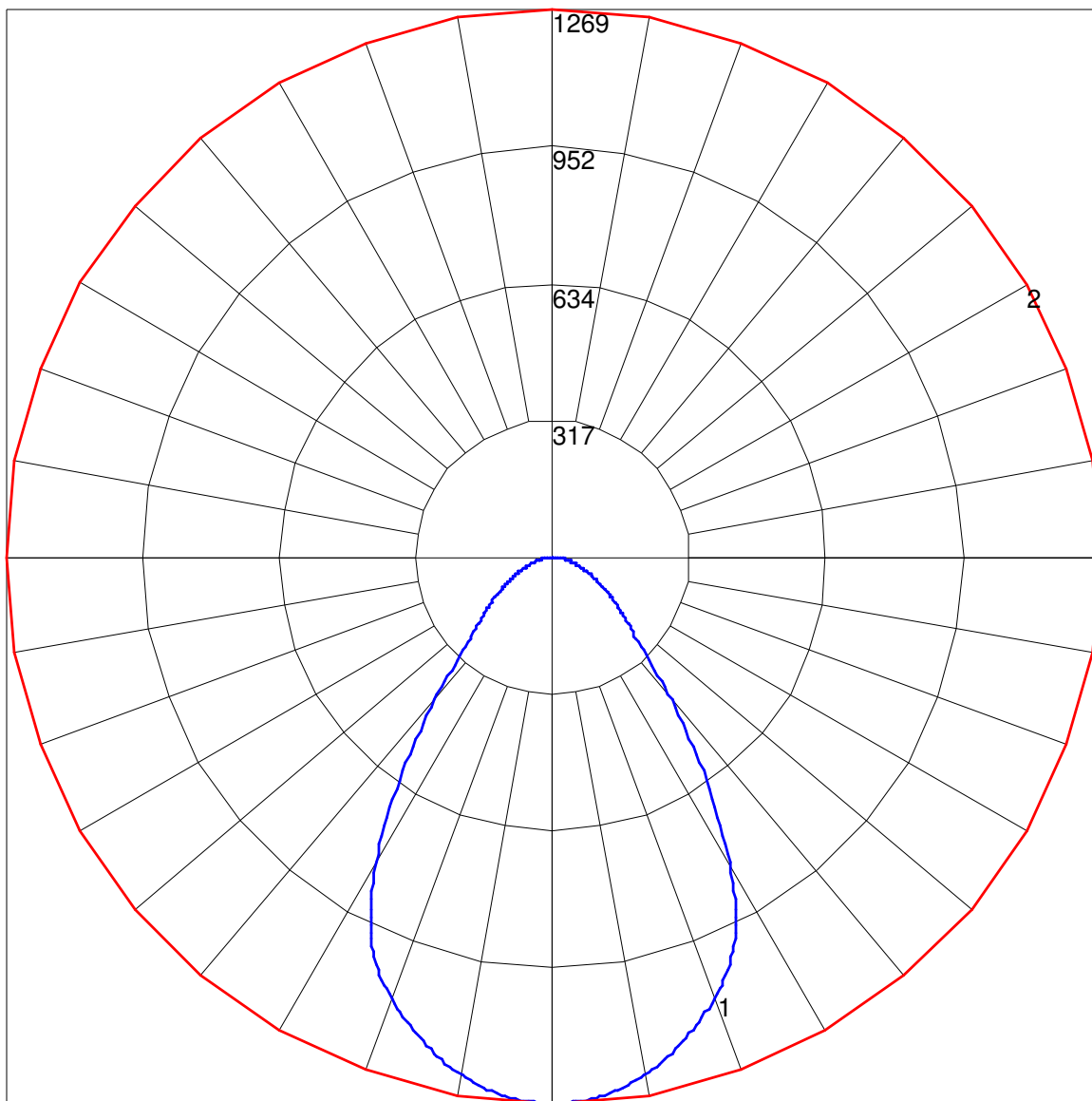
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	18.7	20.0	19.0	20.3	20.6	18.7	20.0	19.0	20.3	20.6
	3H	19.9	21.1	20.3	21.4	21.8	19.9	21.1	20.3	21.4	21.8
	4H	20.3	21.4	20.7	21.8	22.1	20.3	21.4	20.7	21.8	22.1
	6H	20.6	21.6	21.0	22.0	22.4	20.6	21.6	21.0	22.0	22.4
	8H	20.7	21.6	21.1	22.0	22.4	20.7	21.6	21.1	22.0	22.4
	12H	20.7	21.6	21.2	22.0	22.5	20.7	21.6	21.2	22.0	22.5
4H	2H	19.1	20.2	19.5	20.5	20.9	19.1	20.2	19.5	20.5	20.9
	3H	20.5	21.4	20.9	21.8	22.2	20.5	21.4	20.9	21.8	22.2
	4H	21.0	21.8	21.4	22.2	22.7	21.0	21.8	21.4	22.2	22.7
	6H	21.4	22.1	21.9	22.6	23.0	21.4	22.1	21.9	22.6	23.0
	8H	21.6	22.2	22.0	22.6	23.1	21.6	22.2	22.0	22.6	23.1
	12H	21.6	22.2	22.1	22.7	23.2	21.6	22.2	22.1	22.7	23.2
8H	4H	21.2	21.8	21.7	22.3	22.8	21.2	21.8	21.7	22.3	22.8
	6H	21.7	22.2	22.2	22.7	23.2	21.7	22.2	22.2	22.7	23.2
	8H	21.9	22.3	22.4	22.9	23.3	21.9	22.3	22.4	22.9	23.3
	12H	22.0	22.4	22.5	22.9	23.5	22.0	22.4	22.5	22.9	23.5
12H	4H	21.2	21.8	21.7	22.2	22.7	21.2	21.8	21.7	22.2	22.7
	6H	21.7	22.2	22.2	22.7	23.2	21.7	22.2	22.2	22.7	23.2
	8H	21.9	22.3	22.4	22.8	23.4	21.9	22.3	22.4	22.8	23.4

Maximum UGR = 23.5

POLAR GRAPH



Maximum Candela = 1268.851 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.)