

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6LDR-L20-830-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-L20-830-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	1731
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	102
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	20866	20866	20866
55	15368	15368	15368
65	11548	11548	11548
75	8753	8753	8753
85	6383	6383	6383

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CANDELA TABULATION

	<u>0</u>
0.0	1219.576
0.5	1219.576
1.0	1218.967
1.5	1218.359
2.0	1217.143
2.5	1217.143
3.0	1215.318
3.5	1214.101
4.0	1211.668
4.5	1209.843
5.0	1208.019
5.5	1205.585
6.0	1202.544
6.5	1200.111
7.0	1197.070
7.5	1193.420
8.0	1189.771
8.5	1186.121
9.0	1182.471
9.5	1178.213
10.0	1173.956
10.5	1169.089
11.0	1164.223
11.5	1159.357
12.0	1154.491
12.5	1149.017
13.0	1143.542
13.5	1137.460
14.0	1131.985
14.5	1125.294
15.0	1119.820
15.5	1113.129
16.0	1106.438
16.5	1100.355
17.0	1093.056
17.5	1086.365
18.0	1079.066
18.5	1071.767
19.0	1064.467
19.5	1057.168
20.0	1048.653
20.5	1041.353
21.0	1033.446
21.5	1025.538
22.0	1017.023
22.5	1008.507
23.0	999.383
23.5	989.651
24.0	979.310
24.5	968.361
25.0	956.804
25.5	944.639
26.0	930.649
26.5	916.050

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CANDELA TABULATION - (Cont.)

27.0	900.235
27.5	883.812
28.0	866.172
28.5	847.924
29.0	829.068
29.5	808.995
30.0	788.922
30.5	770.066
31.0	749.385
31.5	729.312
32.0	708.631
32.5	687.342
33.0	666.053
33.5	645.371
34.0	624.690
34.5	604.009
35.0	583.693
35.5	563.742
36.0	544.217
36.5	524.813
37.0	505.896
37.5	487.161
38.0	468.852
38.5	450.848
39.0	433.147
39.5	415.994
40.0	399.267
40.5	383.026
41.0	367.454
41.5	352.552
42.0	338.318
42.5	324.875
43.0	312.163
43.5	300.241
44.0	289.170
44.5	278.890
45.0	269.402
45.5	260.582
46.0	252.553
46.5	245.010
47.0	238.137
47.5	231.811
48.0	225.789
48.5	220.254
49.0	214.901
49.5	209.791
50.0	204.925
50.5	200.120
51.0	195.436
51.5	190.813
52.0	186.312
52.5	181.994
53.0	177.675
53.5	173.478
54.0	169.281
54.5	165.084

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CANDELA TABULATION - (Cont.)

55.0	160.947
55.5	156.811
56.0	152.614
56.5	148.600
57.0	144.585
57.5	140.631
58.0	136.738
58.5	132.906
59.0	129.135
59.5	125.486
60.0	121.836
60.5	118.308
61.0	114.780
61.5	111.374
62.0	108.028
62.5	104.683
63.0	101.459
63.5	98.296
64.0	95.133
64.5	92.092
65.0	89.111
65.5	86.252
66.0	83.393
66.5	80.595
67.0	77.858
67.5	75.182
68.0	72.566
68.5	70.072
69.0	67.518
69.5	65.085
70.0	62.712
70.5	60.340
71.0	58.090
71.5	55.778
72.0	53.588
72.5	51.459
73.0	49.330
73.5	47.323
74.0	45.316
74.5	43.309
75.0	41.362
75.5	39.477
76.0	37.652
76.5	35.827
77.0	34.063
77.5	32.299
78.0	30.596
78.5	28.893
79.0	27.250
79.5	25.669
80.0	24.087
80.5	22.567
81.0	21.046
81.5	19.586
82.0	18.126
82.5	16.727

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CANDELA TABULATION - (Cont.)

83.0	15.328
83.5	13.990
84.0	12.652
84.5	11.375
85.0	10.158
85.5	8.942
86.0	7.725
86.5	6.569
87.0	5.414
87.5	4.319
88.0	3.224
88.5	2.190
89.0	1.277
89.5	0.669
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
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125.5	0.000
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128.0	0.000
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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
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152.5	0.000
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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	428.89	N.A.	24.80
0-30	861.84	N.A.	49.80
0-40	1225.98	N.A.	70.80
0-60	1585.56	N.A.	91.60
0-80	1719.03	N.A.	99.30
0-90	1730.66	N.A.	100.00
10-90	1616.45	N.A.	93.40
20-40	797.09	N.A.	46.10
20-50	1012.45	N.A.	58.50
40-70	448.72	N.A.	25.90
60-80	133.47	N.A.	7.70
70-80	44.33	N.A.	2.60
80-90	11.64	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	1730.66	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	114.21
10-20	314.68
20-30	432.95
30-40	364.14
40-50	215.36
50-60	144.23
60-70	89.14
70-80	44.33
80-90	11.64
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	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

X=2H	Y=2H	18.5	19.8	18.8	20.1	20.4	18.5	19.8	18.8	20.1	20.4
	3H	19.7	20.9	20.1	21.2	21.6	19.7	20.9	20.1	21.2	21.6
	4H	20.1	21.2	20.5	21.6	21.9	20.1	21.2	20.5	21.6	21.9
	6H	20.4	21.4	20.8	21.8	22.2	20.4	21.4	20.8	21.8	22.2
	8H	20.5	21.4	20.9	21.8	22.2	20.5	21.4	20.9	21.8	22.2
	12H	20.6	21.5	21.0	21.8	22.3	20.6	21.5	21.0	21.8	22.3

UGR Viewed Endwise

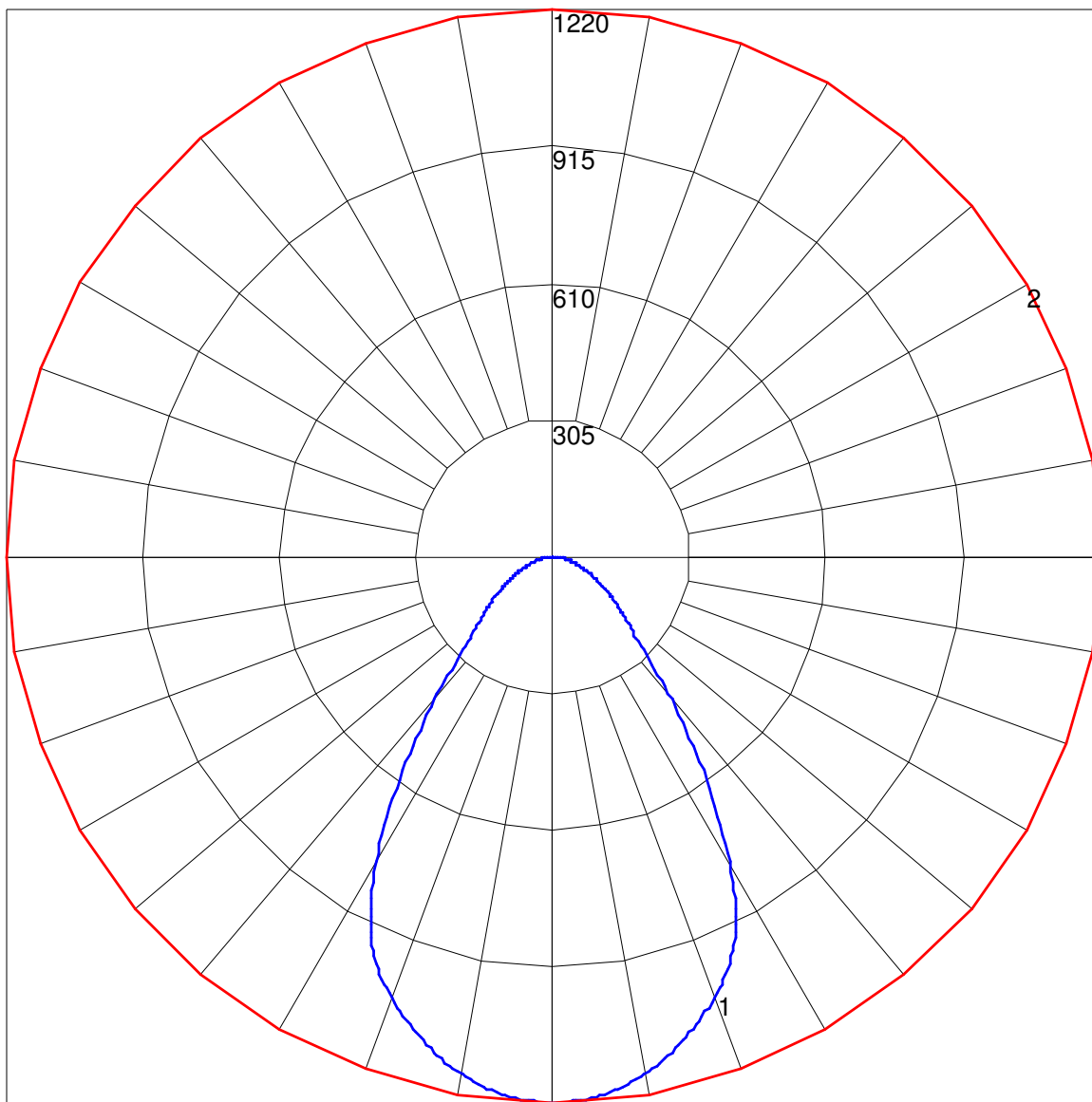
4H	2H	18.9	20.0	19.3	20.3	20.7	18.9	20.0	19.3	20.3	20.7
	3H	20.3	21.2	20.7	21.6	22.0	20.3	21.2	20.7	21.6	22.0
	4H	20.8	21.6	21.3	22.0	22.5	20.8	21.6	21.3	22.0	22.5
	6H	21.2	21.9	21.7	22.4	22.8	21.2	21.9	21.7	22.4	22.8
	8H	21.4	22.0	21.8	22.4	22.9	21.4	22.0	21.8	22.4	22.9
	12H	21.4	22.0	21.9	22.5	23.0	21.4	22.0	21.9	22.5	23.0

8H	4H	21.0	21.6	21.5	22.1	22.6	21.0	21.6	21.5	22.1	22.6
	6H	21.5	22.0	22.0	22.5	23.0	21.5	22.0	22.0	22.5	23.0
	8H	21.7	22.1	22.2	22.7	23.1	21.7	22.1	22.2	22.7	23.1
	12H	21.8	22.2	22.3	22.7	23.3	21.8	22.2	22.3	22.7	23.3

12H	4H	21.0	21.6	21.5	22.0	22.5	21.0	21.6	21.5	22.0	22.5
	6H	21.5	22.0	22.0	22.5	23.0	21.5	22.0	22.0	22.5	23.0
	8H	21.7	22.1	22.2	22.6	23.2	21.7	22.1	22.2	22.6	23.2

Maximum UGR = 23.3

POLAR GRAPH



Maximum Candela = 1219.576 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.)