

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6LDR-L20-830-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
[MANUFACT] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 6LDR-L20-830-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	2019
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
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	20207	20207	20207
55	2213	2213	2213
65	245	245	245
75	90	90	90
85	77	77	77

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CANDELA TABULATION

	<u>0</u>
0.0	2228.819
0.5	2228.819
1.0	2228.819
1.5	2230.039
2.0	2231.259
2.5	2232.479
3.0	2233.698
3.5	2234.308
4.0	2233.089
4.5	2230.649
5.0	2225.769
5.5	2219.059
6.0	2209.300
6.5	2198.320
7.0	2184.901
7.5	2170.262
8.0	2150.743
8.5	2131.834
9.0	2109.875
9.5	2084.867
10.0	2059.858
10.5	2032.409
11.0	2003.131
11.5	1971.413
12.0	1942.134
12.5	1910.416
13.0	1876.868
13.5	1850.029
14.0	1818.921
14.5	1789.033
15.0	1762.194
15.5	1737.185
16.0	1709.127
16.5	1688.388
17.0	1665.819
17.5	1643.251
18.0	1623.122
18.5	1601.163
19.0	1581.644
19.5	1562.735
20.0	1543.826
20.5	1524.917
21.0	1506.008
21.5	1487.099
22.0	1468.190
22.5	1447.451
23.0	1427.932
23.5	1407.193
24.0	1385.845
24.5	1363.886
25.0	1340.707
25.5	1316.308
26.0	1291.300
26.5	1264.461

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CANDELA TABULATION - (Cont.)

27.0	1237.013
27.5	1208.954
28.0	1179.066
28.5	1149.177
29.0	1118.069
29.5	1087.571
30.0	1055.243
30.5	1023.524
31.0	991.196
31.5	959.478
32.0	927.150
32.5	894.821
33.0	863.103
33.5	831.995
34.0	800.276
34.5	769.778
35.0	742.330
35.5	713.051
36.0	683.773
36.5	655.104
37.0	626.436
37.5	598.194
38.0	570.624
38.5	543.541
39.0	517.069
39.5	491.206
40.0	465.954
40.5	441.616
41.0	417.827
41.5	395.015
42.0	372.995
42.5	351.951
43.0	331.822
43.5	312.730
44.0	294.431
44.5	277.230
45.0	260.883
45.5	245.329
46.0	230.567
46.5	216.477
47.0	202.997
47.5	190.066
48.0	177.622
48.5	165.545
49.0	153.651
49.5	142.000
50.0	130.472
50.5	119.005
51.0	107.598
51.5	96.070
52.0	84.602
52.5	72.952
53.0	61.424
53.5	50.322
54.0	40.014
54.5	30.925

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CANDELA TABULATION - (Cont.)

55.0	23.179
55.5	17.201
56.0	12.992
56.5	10.186
57.0	8.418
57.5	7.198
58.0	6.283
58.5	5.612
59.0	5.063
59.5	4.575
60.0	4.148
60.5	3.843
61.0	3.477
61.5	3.233
62.0	2.989
62.5	2.745
63.0	2.501
63.5	2.318
64.0	2.196
64.5	2.013
65.0	1.891
65.5	1.708
66.0	1.647
66.5	1.525
67.0	1.403
67.5	1.281
68.0	1.220
68.5	1.098
69.0	1.037
69.5	0.976
70.0	0.915
70.5	0.854
71.0	0.793
71.5	0.732
72.0	0.671
72.5	0.610
73.0	0.549
73.5	0.549
74.0	0.488
74.5	0.488
75.0	0.427
75.5	0.427
76.0	0.366
76.5	0.366
77.0	0.305
77.5	0.305
78.0	0.305
78.5	0.244
79.0	0.244
79.5	0.244
80.0	0.183
80.5	0.183
81.0	0.183
81.5	0.183
82.0	0.183
82.5	0.122

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CANDELA TABULATION - (Cont.)

83.0	0.122
83.5	0.122
84.0	0.122
84.5	0.122
85.0	0.122
85.5	0.122
86.0	0.061
86.5	0.061
87.0	0.061
87.5	0.061
88.0	0.061
88.5	0.061
89.0	0.061
89.5	0.061
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
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124.5	0.000
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128.0	0.000
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129.0	0.000
129.5	0.000
130.0	0.000
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131.0	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
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	703.33	N.A.	34.80
0-30	1309.91	N.A.	64.90
0-40	1772.19	N.A.	87.80
0-60	2016.72	N.A.	99.90
0-80	2019.27	N.A.	100.00
0-90	2019.39	N.A.	100.00
10-90	1812.13	N.A.	89.70
20-40	1068.86	N.A.	52.90
20-50	1277.31	N.A.	63.30
40-70	246.58	N.A.	12.20
60-80	2.55	N.A.	0.10
70-80	0.50	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	2019.39	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	207.26
10-20	496.07
20-30	606.58
30-40	462.28
40-50	208.44
50-60	36.09
60-70	2.05
70-80	0.50
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	111	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	82	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	62	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

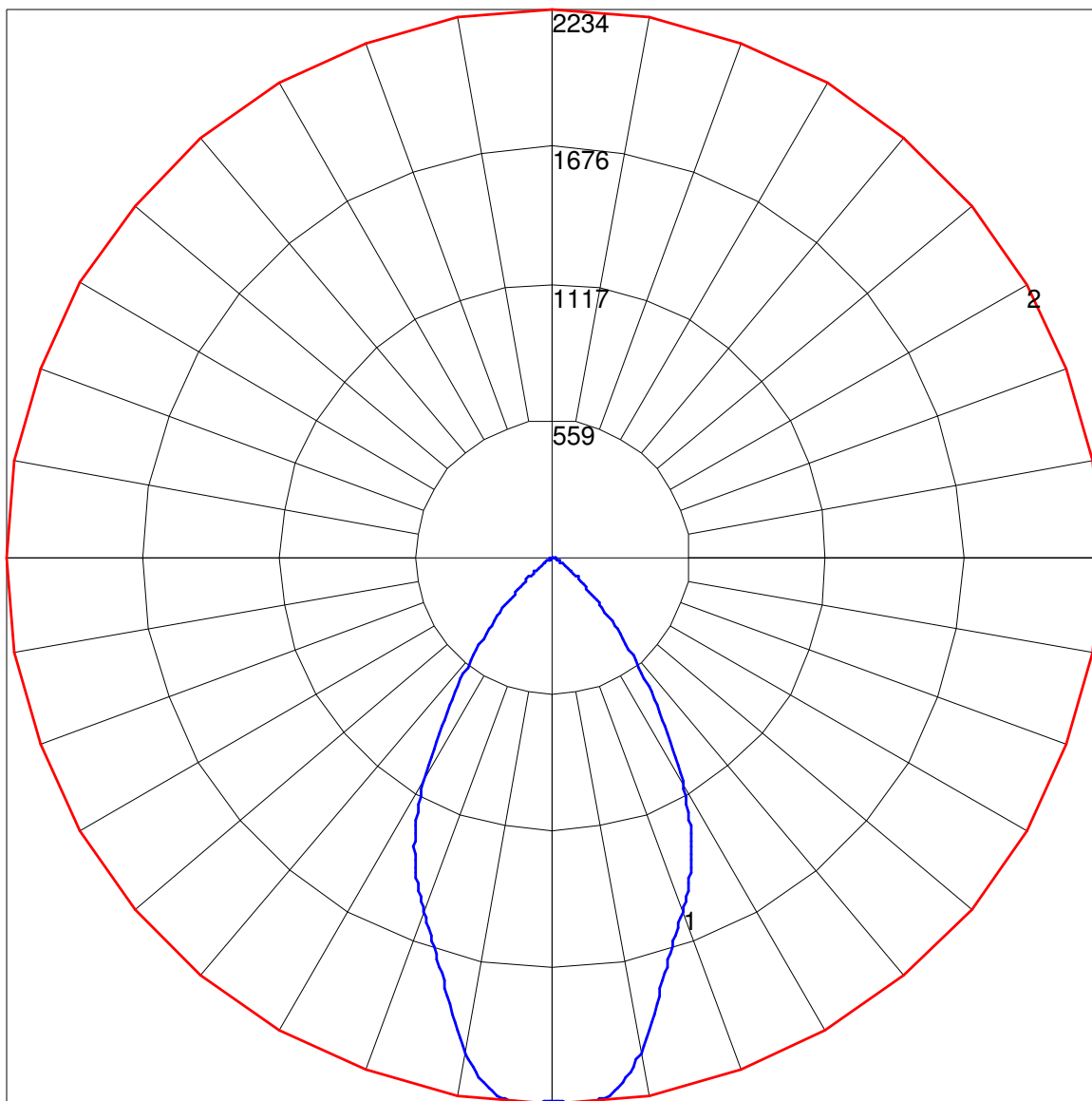
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UGR TABLE - CORRECTED

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 = 2234.308 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.)