

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6LDR-L20-935-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-L20-935-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	1693
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	100
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	16941	16941	16941
55	1856	1856	1856
65	205	205	205
75	76	76	76
85	64	64	64

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CANDELA TABULATION

	<u>0</u>
0.0	1868.605
0.5	1868.605
1.0	1868.605
1.5	1869.628
2.0	1870.651
2.5	1871.674
3.0	1872.697
3.5	1873.208
4.0	1872.185
4.5	1870.140
5.0	1866.049
5.5	1860.423
6.0	1852.241
6.5	1843.036
7.0	1831.786
7.5	1819.512
8.0	1803.148
8.5	1787.295
9.0	1768.885
9.5	1747.918
10.0	1726.951
10.5	1703.939
11.0	1679.393
11.5	1652.800
12.0	1628.254
12.5	1601.662
13.0	1573.536
13.5	1551.035
14.0	1524.954
14.5	1499.896
15.0	1477.395
15.5	1456.428
16.0	1432.904
16.5	1415.517
17.0	1396.596
17.5	1377.675
18.0	1360.799
18.5	1342.389
19.0	1326.025
19.5	1310.172
20.0	1294.319
20.5	1278.466
21.0	1262.613
21.5	1246.760
22.0	1230.907
22.5	1213.520
23.0	1197.155
23.5	1179.768
24.0	1161.870
24.5	1143.460
25.0	1124.027
25.5	1103.572
26.0	1082.605
26.5	1060.104

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CANDELA TABULATION - (Cont.)

27.0	1037.091
27.5	1013.568
28.0	988.510
28.5	963.452
29.0	937.371
29.5	911.802
30.0	884.698
30.5	858.106
31.0	831.003
31.5	804.411
32.0	777.307
32.5	750.204
33.0	723.612
33.5	697.531
34.0	670.939
34.5	645.369
35.0	622.357
35.5	597.811
36.0	573.264
36.5	549.229
37.0	525.194
37.5	501.517
38.0	478.402
38.5	455.696
39.0	433.502
39.5	411.819
40.0	390.648
40.5	370.244
41.0	350.300
41.5	331.174
42.0	312.713
42.5	295.070
43.0	278.194
43.5	262.188
44.0	246.846
44.5	232.425
45.0	218.720
45.5	205.680
46.0	193.304
46.5	181.491
47.0	170.189
47.5	159.348
48.0	148.916
48.5	138.790
49.0	128.818
49.5	119.051
50.0	109.386
50.5	99.771
51.0	90.209
51.5	80.543
52.0	70.929
52.5	61.162
53.0	51.497
53.5	42.189
54.0	33.547
54.5	25.927

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CANDELA TABULATION - (Cont.)

55.0	19.433
55.5	14.421
56.0	10.893
56.5	8.540
57.0	7.057
57.5	6.034
58.0	5.267
58.5	4.705
59.0	4.245
59.5	3.835
60.0	3.477
60.5	3.222
61.0	2.915
61.5	2.710
62.0	2.506
62.5	2.301
63.0	2.097
63.5	1.943
64.0	1.841
64.5	1.688
65.0	1.585
65.5	1.432
66.0	1.381
66.5	1.278
67.0	1.176
67.5	1.074
68.0	1.023
68.5	0.920
69.0	0.869
69.5	0.818
70.0	0.767
70.5	0.716
71.0	0.665
71.5	0.614
72.0	0.563
72.5	0.511
73.0	0.460
73.5	0.460
74.0	0.409
74.5	0.409
75.0	0.358
75.5	0.358
76.0	0.307
76.5	0.307
77.0	0.256
77.5	0.256
78.0	0.256
78.5	0.205
79.0	0.205
79.5	0.205
80.0	0.153
80.5	0.153
81.0	0.153
81.5	0.153
82.0	0.153
82.5	0.102

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CANDELA TABULATION - (Cont.)

83.0	0.102
83.5	0.102
84.0	0.102
84.5	0.102
85.0	0.102
85.5	0.102
86.0	0.051
86.5	0.051
87.0	0.051
87.5	0.051
88.0	0.051
88.5	0.051
89.0	0.051
89.5	0.051
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
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122.0	0.000
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125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	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	589.66	N.A.	34.80
0-30	1098.21	N.A.	64.90
0-40	1485.78	N.A.	87.80
0-60	1690.79	N.A.	99.90
0-80	1692.92	N.A.	100.00
0-90	1693.02	N.A.	100.00
10-90	1519.26	N.A.	89.70
20-40	896.12	N.A.	52.90
20-50	1070.87	N.A.	63.30
40-70	206.72	N.A.	12.20
60-80	2.13	N.A.	0.10
70-80	0.42	N.A.	0.00
80-90	0.10	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	1693.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	173.76
10-20	415.90
20-30	508.55
30-40	387.57
40-50	174.76
50-60	30.25
60-70	1.71
70-80	0.42
80-90	0.10
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	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	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

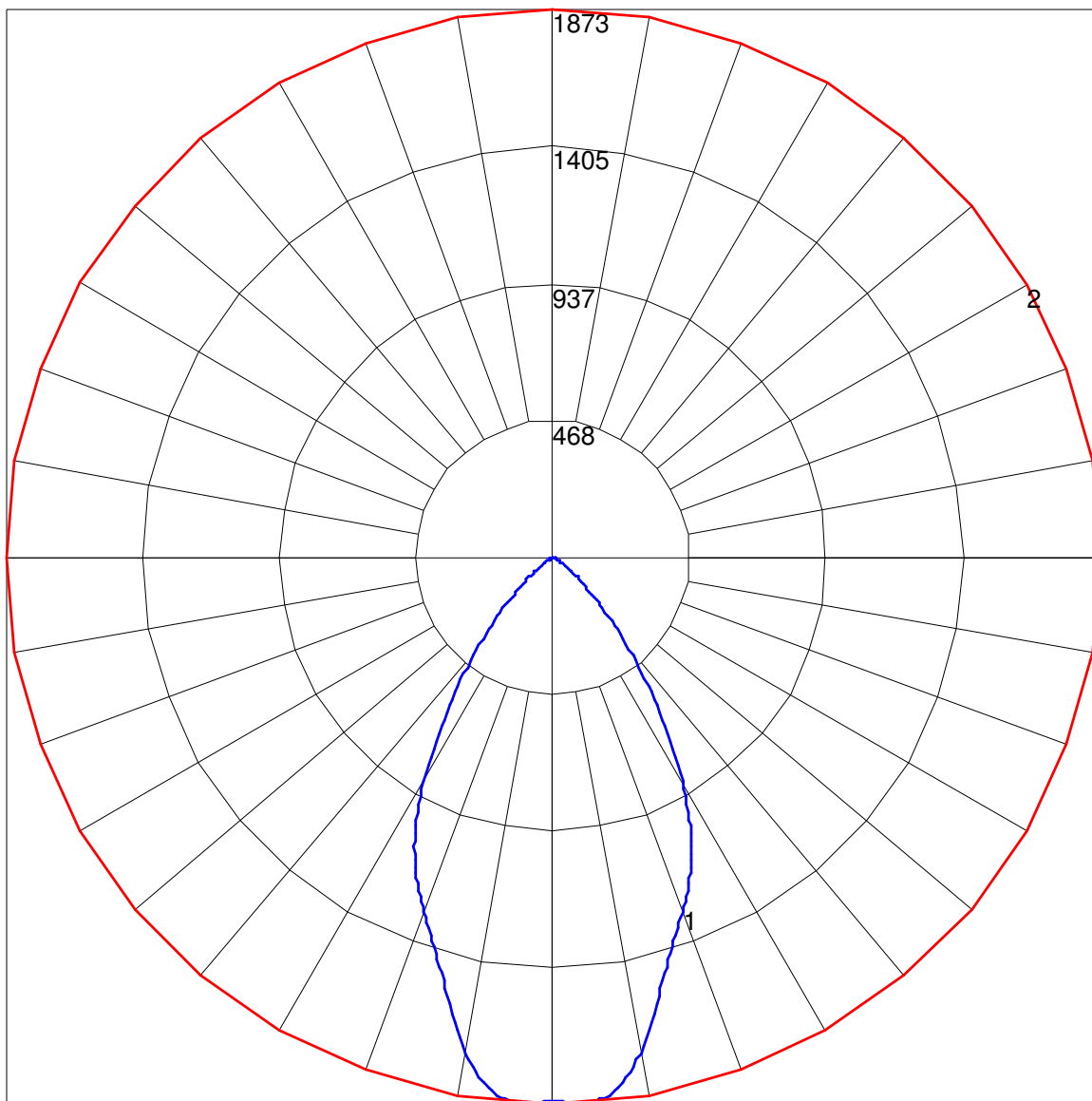
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UGR TABLE - CORRECTED

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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	3H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	4H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	6H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	8H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	12H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
4H	2H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	3H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	4H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	6H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	8H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	12H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
8H	4H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	6H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	8H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	12H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
12H	4H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	6H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	8H	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9

Maximum UGR = 1.9

POLAR GRAPH



Maximum Candela = 1873.208 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.)