

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6LDR-L20-940-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
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 6LDR-L20-940-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	1754
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)	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	17553	17553	17553
55	1923	1923	1923
65	213	213	213
75	79	79	79
85	67	67	67

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CANDELA TABULATION

	<u>0</u>
0.0	1936.146
0.5	1936.146
1.0	1936.146
1.5	1937.205
2.0	1938.265
2.5	1939.325
3.0	1940.385
3.5	1940.915
4.0	1939.855
4.5	1937.735
5.0	1933.496
5.5	1927.668
6.0	1919.190
6.5	1909.652
7.0	1897.995
7.5	1885.278
8.0	1868.322
8.5	1851.896
9.0	1832.821
9.5	1811.096
10.0	1789.372
10.5	1765.528
11.0	1740.094
11.5	1712.541
12.0	1687.107
12.5	1659.554
13.0	1630.411
13.5	1607.096
14.0	1580.073
14.5	1554.109
15.0	1530.795
15.5	1509.070
16.0	1484.696
16.5	1466.681
17.0	1447.076
17.5	1427.470
18.0	1409.985
18.5	1390.909
19.0	1373.953
19.5	1357.527
20.0	1341.102
20.5	1324.676
21.0	1308.250
21.5	1291.824
22.0	1275.398
22.5	1257.382
23.0	1240.426
23.5	1222.411
24.0	1203.865
24.5	1184.790
25.0	1164.655
25.5	1143.460
26.0	1121.735
26.5	1098.421

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CANDELA TABULATION - (Cont.)

27.0	1074.577
27.5	1050.203
28.0	1024.239
28.5	998.275
29.0	971.252
29.5	944.759
30.0	916.675
30.5	889.122
31.0	861.039
31.5	833.486
32.0	805.403
32.5	777.320
33.0	749.766
33.5	722.743
34.0	695.190
34.5	668.696
35.0	644.852
35.5	619.418
36.0	593.985
36.5	569.081
37.0	544.177
37.5	519.644
38.0	495.694
38.5	472.167
39.0	449.171
39.5	426.704
40.0	404.768
40.5	383.626
41.0	362.961
41.5	343.144
42.0	324.016
42.5	305.735
43.0	288.249
43.5	271.664
44.0	255.768
44.5	240.826
45.0	226.625
45.5	213.114
46.0	200.291
46.5	188.051
47.0	176.341
47.5	165.108
48.0	154.298
48.5	143.807
49.0	133.474
49.5	123.354
50.0	113.339
50.5	103.378
51.0	93.469
51.5	83.455
52.0	73.493
52.5	63.372
53.0	53.358
53.5	43.714
54.0	34.759
54.5	26.864

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CANDELA TABULATION - (Cont.)

55.0	20.135
55.5	14.942
56.0	11.286
56.5	8.849
57.0	7.312
57.5	6.252
58.0	5.458
58.5	4.875
59.0	4.398
59.5	3.974
60.0	3.603
60.5	3.338
61.0	3.020
61.5	2.808
62.0	2.596
62.5	2.384
63.0	2.172
63.5	2.014
64.0	1.908
64.5	1.749
65.0	1.643
65.5	1.484
66.0	1.431
66.5	1.325
67.0	1.219
67.5	1.113
68.0	1.060
68.5	0.954
69.0	0.901
69.5	0.848
70.0	0.795
70.5	0.742
71.0	0.689
71.5	0.636
72.0	0.583
72.5	0.530
73.0	0.477
73.5	0.477
74.0	0.424
74.5	0.424
75.0	0.371
75.5	0.371
76.0	0.318
76.5	0.318
77.0	0.265
77.5	0.265
78.0	0.265
78.5	0.212
79.0	0.212
79.5	0.212
80.0	0.159
80.5	0.159
81.0	0.159
81.5	0.159
82.0	0.159
82.5	0.106

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CANDELA TABULATION - (Cont.)

83.0	0.106
83.5	0.106
84.0	0.106
84.5	0.106
85.0	0.106
85.5	0.106
86.0	0.053
86.5	0.053
87.0	0.053
87.5	0.053
88.0	0.053
88.5	0.053
89.0	0.053
89.5	0.053
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
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122.5	0.000
123.0	0.000
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124.0	0.000
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125.0	0.000
125.5	0.000
126.0	0.000
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127.0	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
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	610.97	N.A.	34.80
0-30	1137.9	N.A.	64.90
0-40	1539.48	N.A.	87.80
0-60	1751.9	N.A.	99.90
0-80	1754.11	N.A.	100.00
0-90	1754.22	N.A.	100.00
10-90	1574.17	N.A.	89.70
20-40	928.51	N.A.	52.90
20-50	1109.58	N.A.	63.30
40-70	214.20	N.A.	12.20
60-80	2.21	N.A.	0.10
70-80	0.43	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	1754.22	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	180.04
10-20	430.93
20-30	526.93
30-40	401.58
40-50	181.07
50-60	31.35
60-70	1.78
70-80	0.43
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	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

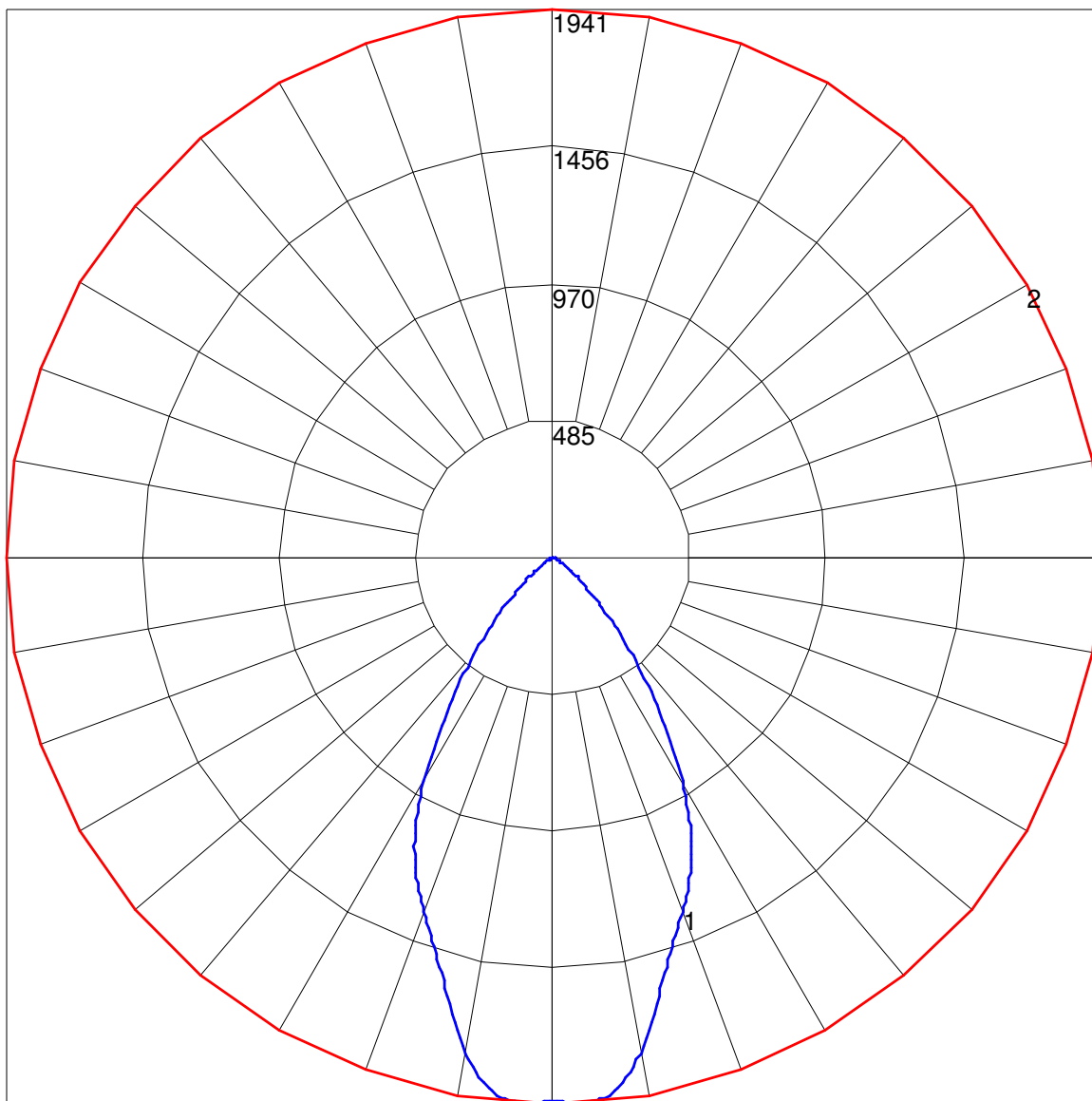
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UGR TABLE - CORRECTED

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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	3H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	4H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	6H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	8H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	12H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
4H	2H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	3H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	4H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	6H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	8H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	12H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8H	4H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	6H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	8H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	12H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
12H	4H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	6H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	8H	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Maximum UGR = 2.0

POLAR GRAPH



Maximum Candela = 1940.915 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.)