

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6LDR-L20-940-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-L20-940-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	1503
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
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	18126	18126	18126
55	13350	13350	13350
65	10032	10032	10032
75	7603	7603	7603
85	5545	5545	5545

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CANDELA TABULATION

	<u>0</u>
0.0	1059.429
0.5	1059.429
1.0	1058.901
1.5	1058.373
2.0	1057.316
2.5	1057.316
3.0	1055.731
3.5	1054.674
4.0	1052.560
4.5	1050.975
5.0	1049.390
5.5	1047.276
6.0	1044.634
6.5	1042.521
7.0	1039.879
7.5	1036.708
8.0	1033.538
8.5	1030.368
9.0	1027.197
9.5	1023.499
10.0	1019.800
10.5	1015.573
11.0	1011.346
11.5	1007.118
12.0	1002.891
12.5	998.136
13.0	993.380
13.5	988.096
14.0	983.341
14.5	977.528
15.0	972.773
15.5	966.960
16.0	961.148
16.5	955.864
17.0	949.523
17.5	943.711
18.0	937.370
18.5	931.030
19.0	924.689
19.5	918.348
20.0	910.951
20.5	904.610
21.0	897.741
21.5	890.872
22.0	883.474
22.5	876.077
23.0	868.151
23.5	859.697
24.0	850.714
24.5	841.203
25.0	831.163
25.5	820.595
26.0	808.442
26.5	795.761

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**CANDELA TABULATION - (Cont.)**

27.0	782.023
27.5	767.756
28.0	752.433
28.5	736.581
29.0	720.201
29.5	702.764
30.0	685.327
30.5	668.946
31.0	650.981
31.5	633.544
32.0	615.579
32.5	597.085
33.0	578.591
33.5	560.626
34.0	542.660
34.5	524.695
35.0	507.047
35.5	489.715
36.0	472.754
36.5	455.898
37.0	439.465
37.5	423.191
38.0	407.286
38.5	391.645
39.0	376.269
39.5	361.368
40.0	346.838
40.5	332.730
41.0	319.203
41.5	306.257
42.0	293.893
42.5	282.215
43.0	271.172
43.5	260.815
44.0	251.198
44.5	242.269
45.0	234.026
45.5	226.364
46.0	219.389
46.5	212.837
47.0	206.866
47.5	201.371
48.0	196.140
48.5	191.331
49.0	186.681
49.5	182.243
50.0	178.016
50.5	173.842
51.0	169.773
51.5	165.757
52.0	161.847
52.5	158.095
53.0	154.344
53.5	150.698
54.0	147.052
54.5	143.406

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**CANDELA TABULATION - (Cont.)**

55.0	139.813
55.5	136.220
56.0	132.574
56.5	129.087
57.0	125.599
57.5	122.165
58.0	118.783
58.5	115.454
59.0	112.178
59.5	109.008
60.0	105.837
60.5	102.773
61.0	99.708
61.5	96.749
62.0	93.843
62.5	90.937
63.0	88.136
63.5	85.388
64.0	82.641
64.5	79.999
65.0	77.410
65.5	74.926
66.0	72.443
66.5	70.012
67.0	67.634
67.5	65.309
68.0	63.037
68.5	60.871
69.0	58.652
69.5	56.538
70.0	54.477
70.5	52.417
71.0	50.462
71.5	48.454
72.0	46.551
72.5	44.702
73.0	42.853
73.5	41.109
74.0	39.365
74.5	37.622
75.0	35.931
75.5	34.293
76.0	32.708
76.5	31.122
77.0	29.590
77.5	28.058
78.0	26.578
78.5	25.099
79.0	23.672
79.5	22.298
80.0	20.924
80.5	19.603
81.0	18.282
81.5	17.014
82.0	15.746
82.5	14.531

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CANDELA TABULATION - (Cont.)

83.0	13.316
83.5	12.153
84.0	10.991
84.5	9.881
85.0	8.824
85.5	7.767
86.0	6.711
86.5	5.707
87.0	4.703
87.5	3.752
88.0	2.800
88.5	1.902
89.0	1.110
89.5	0.581
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
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121.0	0.000
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125.5	0.000
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126.5	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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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
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147.0	0.000
147.5	0.000
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150.5	0.000
151.0	0.000
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152.0	0.000
152.5	0.000
153.0	0.000
153.5	0.000
154.0	0.000
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156.5	0.000
157.0	0.000
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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	372.57	N.A.	24.80
0-30	748.67	N.A.	49.80
0-40	1064.99	N.A.	70.80
0-60	1377.36	N.A.	91.60
0-80	1493.3	N.A.	99.30
0-90	1503.41	N.A.	100.00
10-90	1404.19	N.A.	93.40
20-40	692.42	N.A.	46.10
20-50	879.50	N.A.	58.50
40-70	389.80	N.A.	25.90
60-80	115.94	N.A.	7.70
70-80	38.51	N.A.	2.60
80-90	10.11	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	1503.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	99.21
10-20	273.36
20-30	376.10
30-40	316.32
40-50	187.08
50-60	125.29
60-70	77.43
70-80	38.51
80-90	10.11
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	112	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	70	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	43	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**

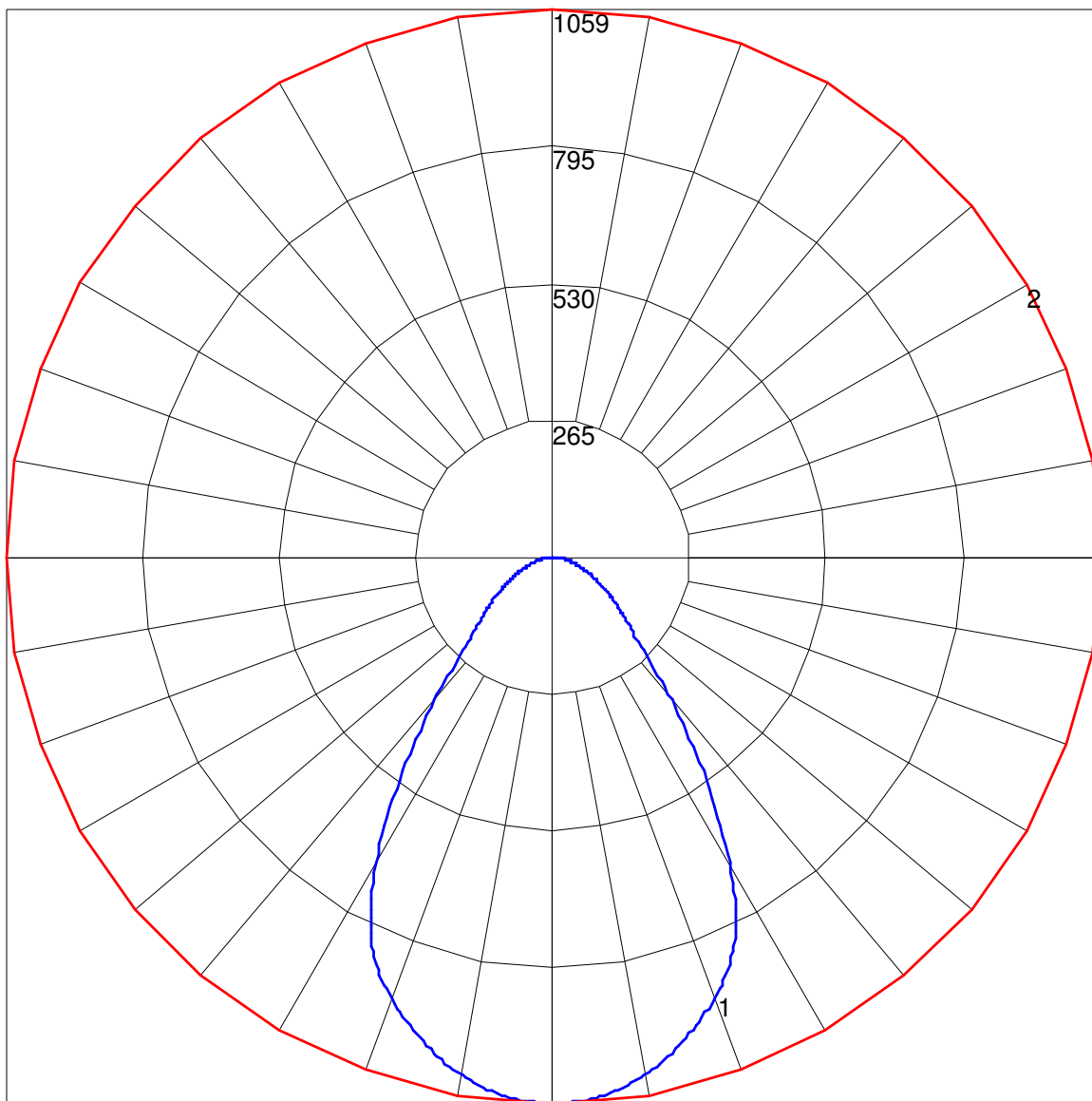
Reflectances

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	18.0	19.3	18.3	19.6	19.9	18.0	19.3	18.3	19.6	19.9
	3H	19.2	20.4	19.6	20.7	21.1	19.2	20.4	19.6	20.7	21.1
	4H	19.6	20.7	20.0	21.1	21.4	19.6	20.7	20.0	21.1	21.4
	6H	19.9	20.9	20.3	21.3	21.7	19.9	20.9	20.3	21.3	21.7
	8H	20.0	20.9	20.4	21.3	21.7	20.0	20.9	20.4	21.3	21.7
	12H	20.1	21.0	20.5	21.3	21.8	20.1	21.0	20.5	21.3	21.8
4H	2H	18.4	19.5	18.8	19.8	20.2	18.4	19.5	18.8	19.8	20.2
	3H	19.8	20.7	20.2	21.1	21.5	19.8	20.7	20.2	21.1	21.5
	4H	20.3	21.1	20.8	21.5	22.0	20.3	21.1	20.8	21.5	22.0
	6H	20.7	21.4	21.2	21.9	22.3	20.7	21.4	21.2	21.9	22.3
	8H	20.9	21.5	21.3	21.9	22.4	20.9	21.5	21.3	21.9	22.4
	12H	20.9	21.5	21.4	22.0	22.5	20.9	21.5	21.4	22.0	22.5
8H	4H	20.5	21.1	21.0	21.6	22.1	20.5	21.1	21.0	21.6	22.1
	6H	21.0	21.5	21.5	22.0	22.5	21.0	21.5	21.5	22.0	22.5
	8H	21.2	21.6	21.7	22.2	22.6	21.2	21.6	21.7	22.2	22.6
	12H	21.3	21.7	21.8	22.2	22.8	21.3	21.7	21.8	22.2	22.8
12H	4H	20.5	21.1	21.0	21.5	22.0	20.5	21.1	21.0	21.5	22.0
	6H	21.0	21.5	21.5	22.0	22.5	21.0	21.5	21.5	22.0	22.5
	8H	21.2	21.6	21.7	22.1	22.7	21.2	21.6	21.7	22.1	22.7

Maximum UGR = 22.8

POLAR GRAPH



Maximum Candela = 1059.429 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.)