

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6LDR-L20-935-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-L20-935-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	1451
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	85
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	17494	17494	17494
55	12885	12885	12885
65	9682	9682	9682
75	7338	7338	7338
85	5351	5351	5351

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CANDELA TABULATION

	<u>0</u>
0.0	1022.472
0.5	1022.472
1.0	1021.962
1.5	1021.452
2.0	1020.433
2.5	1020.433
3.0	1018.903
3.5	1017.883
4.0	1015.843
4.5	1014.313
5.0	1012.783
5.5	1010.743
6.0	1008.194
6.5	1006.154
7.0	1003.604
7.5	1000.544
8.0	997.484
8.5	994.425
9.0	991.365
9.5	987.795
10.0	984.225
10.5	980.146
11.0	976.066
11.5	971.986
12.0	967.907
12.5	963.317
13.0	958.727
13.5	953.628
14.0	949.038
14.5	943.428
15.0	938.839
15.5	933.229
16.0	927.620
16.5	922.520
17.0	916.400
17.5	910.791
18.0	904.671
18.5	898.552
19.0	892.432
19.5	886.313
20.0	879.173
20.5	873.054
21.0	866.424
21.5	859.795
22.0	852.655
22.5	845.516
23.0	837.866
23.5	829.707
24.0	821.038
24.5	811.858
25.0	802.169
25.5	791.970
26.0	780.241
26.5	768.002

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CANDELA TABULATION - (Cont.)

27.0	754.743
27.5	740.974
28.0	726.185
28.5	710.886
29.0	695.077
29.5	678.249
30.0	661.420
30.5	645.611
31.0	628.272
31.5	611.444
32.0	594.105
32.5	576.256
33.0	558.408
33.5	541.069
34.0	523.730
34.5	506.392
35.0	489.359
35.5	472.632
36.0	456.262
36.5	439.995
37.0	424.135
37.5	408.428
38.0	393.078
38.5	377.983
39.0	363.143
39.5	348.763
40.0	334.739
40.5	321.123
41.0	308.068
41.5	295.574
42.0	283.640
42.5	272.370
43.0	261.712
43.5	251.717
44.0	242.436
44.5	233.817
45.0	225.862
45.5	218.467
46.0	211.736
46.5	205.412
47.0	199.650
47.5	194.346
48.0	189.298
48.5	184.657
49.0	180.169
49.5	175.886
50.0	171.806
50.5	167.777
51.0	163.851
51.5	159.975
52.0	156.201
52.5	152.580
53.0	148.960
53.5	145.441
54.0	141.922
54.5	138.403

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CANDELA TABULATION - (Cont.)

55.0	134.936
55.5	131.468
56.0	127.949
56.5	124.584
57.0	121.218
57.5	117.903
58.0	114.639
58.5	111.427
59.0	108.265
59.5	105.205
60.0	102.145
60.5	99.187
61.0	96.230
61.5	93.374
62.0	90.569
62.5	87.764
63.0	85.062
63.5	82.410
64.0	79.758
64.5	77.208
65.0	74.709
65.5	72.313
66.0	69.916
66.5	67.570
67.0	65.275
67.5	63.031
68.0	60.838
68.5	58.748
69.0	56.606
69.5	54.566
70.0	52.577
70.5	50.588
71.0	48.701
71.5	46.763
72.0	44.928
72.5	43.143
73.0	41.358
73.5	39.675
74.0	37.992
74.5	36.309
75.0	34.677
75.5	33.096
76.0	31.567
76.5	30.037
77.0	28.558
77.5	27.079
78.0	25.651
78.5	24.223
79.0	22.846
79.5	21.520
80.0	20.194
80.5	18.920
81.0	17.645
81.5	16.421
82.0	15.197
82.5	14.024

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CANDELA TABULATION - (Cont.)

83.0	12.851
83.5	11.729
84.0	10.607
84.5	9.536
85.0	8.516
85.5	7.496
86.0	6.477
86.5	5.508
87.0	4.539
87.5	3.621
88.0	2.703
88.5	1.836
89.0	1.071
89.5	0.561
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
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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
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145.0	0.000
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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
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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	359.57	N.A.	24.80
0-30	722.55	N.A.	49.80
0-40	1027.84	N.A.	70.80
0-60	1329.31	N.A.	91.60
0-80	1441.21	N.A.	99.30
0-90	1450.96	N.A.	100.00
10-90	1355.21	N.A.	93.40
20-40	668.27	N.A.	46.10
20-50	848.82	N.A.	58.50
40-70	376.20	N.A.	25.90
60-80	111.90	N.A.	7.70
70-80	37.16	N.A.	2.60
80-90	9.76	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	1450.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	95.75
10-20	263.82
20-30	362.98
30-40	305.29
40-50	180.55
50-60	120.92
60-70	74.73
70-80	37.16
80-90	9.76
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	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

X=2H	Y=2H	17.9	19.2	18.2	19.5	19.8	UGR Viewed Endwise			
	3H	19.1	20.3	19.5	20.6	21.0	17.9	19.2	18.2	19.5
	4H	19.5	20.6	19.9	21.0	21.3	19.1	20.3	19.5	20.6
	6H	19.8	20.8	20.2	21.2	21.6	19.5	20.6	19.9	21.0
	8H	19.9	20.8	20.3	21.2	21.6	19.8	20.8	20.2	21.2
	12H	19.9	20.8	20.4	21.2	21.7	19.9	20.8	20.3	21.2

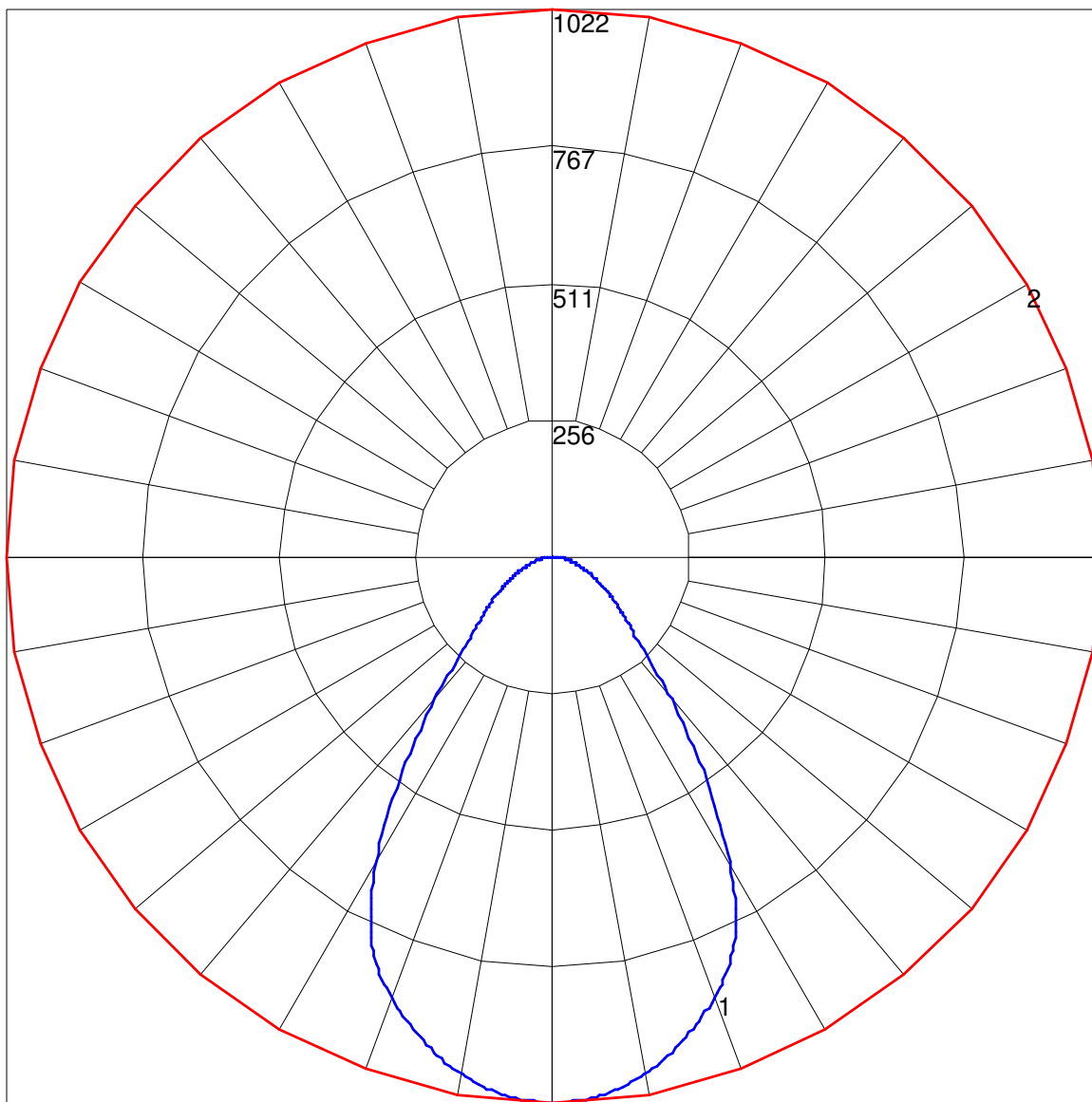
4H	2H	18.3	19.4	18.7	19.7	20.1	17.9	19.2	18.2	19.5
	3H	19.7	20.6	20.1	21.0	21.4	19.1	20.3	19.5	20.6
	4H	20.2	21.0	20.6	21.4	21.9	19.5	20.6	19.9	21.0
	6H	20.6	21.3	21.1	21.8	22.2	19.8	20.8	20.2	21.2
	8H	20.8	21.4	21.2	21.8	22.3	19.9	20.8	20.3	21.2
	12H	20.8	21.4	21.3	21.9	22.4	19.9	20.8	20.4	21.2

8H	4H	20.4	21.0	20.9	21.5	21.9	19.8	20.8	20.2	21.2
	6H	20.9	21.4	21.4	21.9	22.4	19.9	20.8	20.3	21.2
	8H	21.1	21.5	21.6	22.1	22.5	19.9	20.8	20.3	21.2
	12H	21.2	21.6	21.7	22.1	22.7	19.9	20.8	20.4	21.2

12H	4H	20.4	21.0	20.9	21.4	21.9	19.8	20.8	20.2	21.2
	6H	20.9	21.4	21.4	21.9	22.4	19.9	20.8	20.3	21.2
	8H	21.1	21.5	21.6	22.0	22.6	19.9	20.8	20.3	21.2

Maximum UGR = 22.7

POLAR GRAPH



Maximum Candela = 1022.472 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.)