

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4LDR-L10-930-WH-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.02
[TESTLAB] UL, LLC
[ISSUE DATE] 2025-12-10
[TEST DATE] 11/11/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 4LDR-L10-930-WH-DIM-UNV
[LUMINAIRE] 4" 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	708
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	9.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	1.04
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.38 ft (Diameter)
Luminous Width (90-270)	0.38 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	16912	16912	16912
55	11368	11368	11368
65	8563	8563	8563
75	6502	6502	6502
85	4756	4756	4756

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CANDELA TABULATION

	<u>0</u>
0.0	482.565
0.5	482.820
1.0	482.565
1.5	482.310
2.0	482.055
2.5	481.800
3.0	481.290
3.5	480.781
4.0	480.271
4.5	479.506
5.0	478.996
5.5	477.977
6.0	477.467
6.5	476.192
7.0	475.172
7.5	473.898
8.0	472.878
8.5	471.603
9.0	470.074
9.5	468.544
10.0	467.270
10.5	465.740
11.0	464.211
11.5	462.426
12.0	460.387
12.5	458.603
13.0	456.818
13.5	454.524
14.0	452.484
14.5	450.445
15.0	448.151
15.5	445.856
16.0	443.307
16.5	441.013
17.0	438.464
17.5	435.660
18.0	433.110
18.5	430.306
19.0	427.247
19.5	424.188
20.0	420.874
20.5	417.560
21.0	413.991
21.5	409.913
22.0	405.834
22.5	401.500
23.0	396.912
23.5	391.813
24.0	386.205
24.5	380.852
25.0	374.734
25.5	368.615
26.0	362.752
26.5	356.124

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CANDELA TABULATION - (Cont.)

27.0	349.496
27.5	342.359
28.0	335.476
28.5	328.593
29.0	321.710
29.5	315.337
30.0	308.709
30.5	301.571
31.0	294.434
31.5	287.041
32.0	279.903
32.5	272.765
33.0	265.627
33.5	258.745
34.0	251.709
34.5	244.851
35.0	238.096
35.5	231.392
36.0	224.789
36.5	218.238
37.0	211.788
37.5	205.441
38.0	199.195
38.5	192.950
39.0	186.857
39.5	180.815
40.0	174.901
40.5	169.038
41.0	163.328
41.5	157.694
42.0	152.264
42.5	146.911
43.0	141.761
43.5	136.765
44.0	131.922
44.5	127.282
45.0	122.821
45.5	118.538
46.0	114.459
46.5	110.585
47.0	106.888
47.5	103.396
48.0	100.082
48.5	96.921
49.0	93.938
49.5	91.083
50.0	88.407
50.5	85.832
51.0	83.410
51.5	81.090
52.0	78.872
52.5	76.731
53.0	74.666
53.5	72.652
54.0	70.715
54.5	68.829

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CANDELA TABULATION - (Cont.)

55.0	66.968
55.5	65.209
56.0	63.526
56.5	61.869
57.0	60.212
57.5	58.581
58.0	56.949
58.5	55.318
59.0	53.737
59.5	52.208
60.0	50.678
60.5	49.200
61.0	47.721
61.5	46.319
62.0	44.917
62.5	43.566
63.0	42.240
63.5	40.940
64.0	39.615
64.5	38.391
65.0	37.167
65.5	35.969
66.0	34.771
66.5	33.624
67.0	32.502
67.5	31.406
68.0	30.336
68.5	29.265
69.0	28.220
69.5	27.200
70.0	26.206
70.5	25.237
71.0	24.268
71.5	23.325
72.0	22.408
72.5	21.515
73.0	20.623
73.5	19.782
74.0	18.941
74.5	18.099
75.0	17.284
75.5	16.493
76.0	15.729
76.5	14.964
77.0	14.225
77.5	13.485
78.0	12.797
78.5	12.083
79.0	11.395
79.5	10.732
80.0	10.069
80.5	9.432
81.0	8.795
81.5	8.183
82.0	7.597
82.5	7.010

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CANDELA TABULATION - (Cont.)

83.0	6.424
83.5	5.863
84.0	5.328
84.5	4.767
85.0	4.257
85.5	3.747
86.0	3.237
86.5	2.753
87.0	2.269
87.5	1.810
88.0	1.377
88.5	0.943
89.0	0.561
89.5	0.255
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
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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
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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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158.0	0.000
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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	171.30	N.A.	24.20
0-30	341.47	N.A.	48.30
0-40	490.11	N.A.	69.30
0-60	647.14	N.A.	91.40
0-80	702.82	N.A.	99.30
0-90	707.69	N.A.	100.00
10-90	662.35	N.A.	93.60
20-40	318.81	N.A.	45.00
20-50	415.31	N.A.	58.70
40-70	194.18	N.A.	27.40
60-80	55.68	N.A.	7.90
70-80	18.53	N.A.	2.60
80-90	4.88	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	707.69	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	45.34
10-20	125.96
20-30	170.17
30-40	148.64
40-50	96.50
50-60	60.53
60-70	37.15
70-80	18.53
80-90	4.88
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	104	101	109	105	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	74	79	75	72	70
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37

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UGR TABLE - CORRECTED

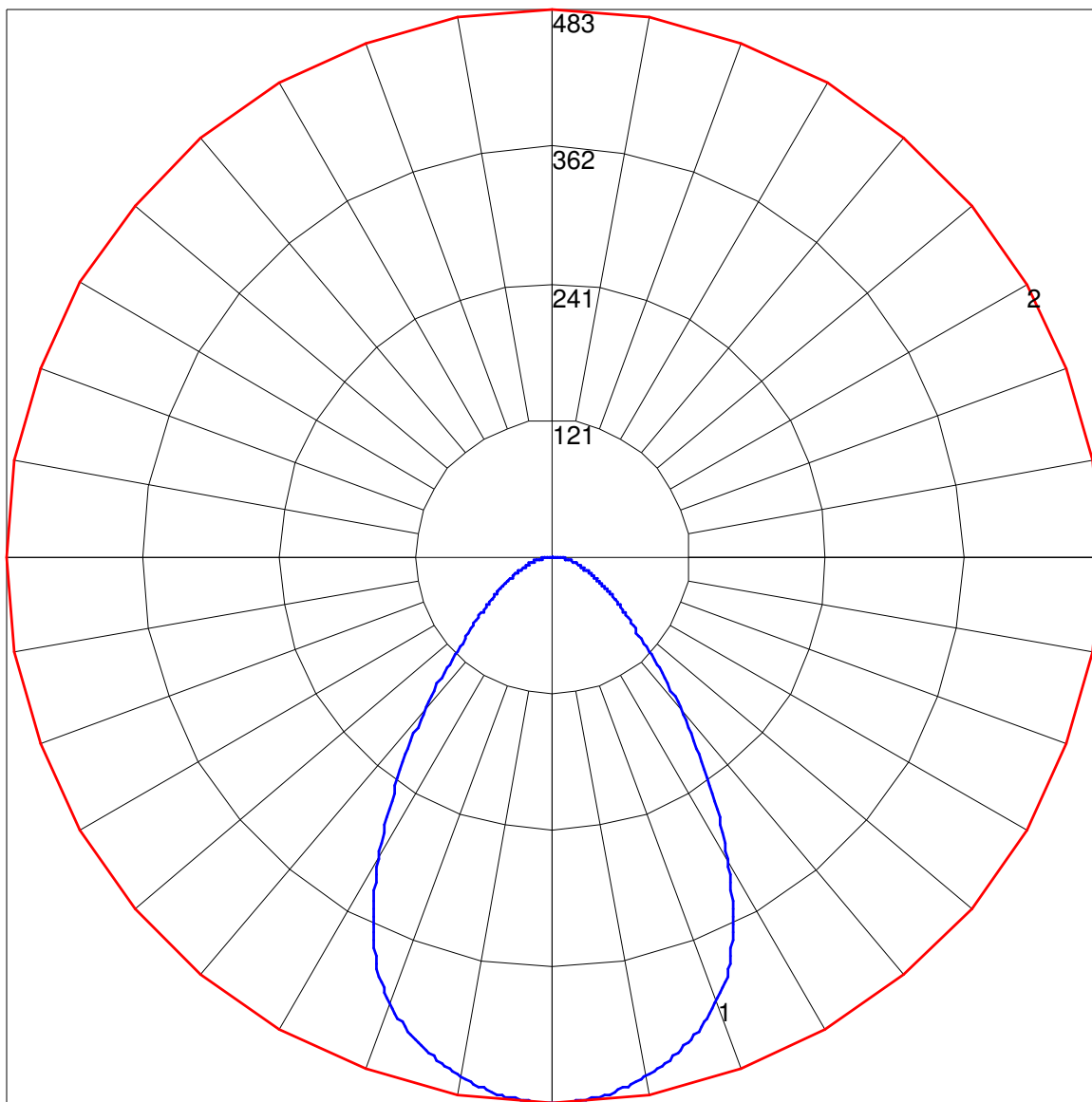
Reflectances

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	17.5	18.8	17.8	19.1	19.4	17.5	18.8	17.8	19.1	19.4
	3H	18.7	19.9	19.1	20.2	20.6	18.7	19.9	19.1	20.2	20.6
	4H	19.1	20.2	19.5	20.6	21.0	19.1	20.2	19.5	20.6	21.0
	6H	19.4	20.4	19.8	20.8	21.2	19.4	20.4	19.8	20.8	21.2
	8H	19.5	20.5	20.0	20.9	21.3	19.5	20.5	20.0	20.9	21.3
	12H	19.6	20.5	20.0	20.9	21.3	19.6	20.5	20.0	20.9	21.3
4H	2H	17.9	19.0	18.3	19.3	19.7	17.9	19.0	18.3	19.3	19.7
	3H	19.3	20.2	19.7	20.6	21.0	19.3	20.2	19.7	20.6	21.0
	4H	19.8	20.7	20.3	21.1	21.5	19.8	20.7	20.3	21.1	21.5
	6H	20.3	21.0	20.7	21.4	21.9	20.3	21.0	20.7	21.4	21.9
	8H	20.4	21.0	20.8	21.5	21.9	20.4	21.0	20.8	21.5	21.9
	12H	20.5	21.0	20.9	21.5	22.0	20.5	21.0	20.9	21.5	22.0
8H	4H	20.0	20.7	20.5	21.1	21.6	20.0	20.7	20.5	21.1	21.6
	6H	20.5	21.1	21.0	21.5	22.0	20.5	21.1	21.0	21.5	22.0
	8H	20.7	21.2	21.2	21.7	22.2	20.7	21.2	21.2	21.7	22.2
	12H	20.8	21.3	21.4	21.8	22.3	20.8	21.3	21.4	21.8	22.3
12H	4H	20.0	20.6	20.5	21.1	21.5	20.0	20.6	20.5	21.1	21.5
	6H	20.5	21.0	21.1	21.5	22.0	20.5	21.0	21.1	21.5	22.0
	8H	20.8	21.2	21.3	21.7	22.3	20.8	21.2	21.3	21.7	22.3

Maximum UGR = 22.3

POLAR GRAPH



Maximum Candela = 482.82 Located At Horizontal Angle = 0, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)