

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4LDR-L15-930-BL-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 4792018053.05
[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-L15-930-BL-DIM-UNV
[LUMINAIRE] 4" recessed downlight with textured black 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	497
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	36
Total Luminaire Watts	13.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.00
Spacing Criterion (90-270)	1.00
Spacing Criterion (Diagonal)	0.94
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	6232	6232	6232
55	807	807	807
65	280	280	280
75	121	121	121
85	79	79	79

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CANDELA TABULATION

	<u>0</u>
0.0	496.920
0.5	496.920
1.0	496.920
1.5	496.563
2.0	496.205
2.5	495.848
3.0	495.490
3.5	494.418
4.0	493.703
4.5	492.988
5.0	491.915
5.5	491.200
6.0	489.770
6.5	488.698
7.0	487.268
7.5	485.838
8.0	484.408
8.5	482.620
9.0	480.833
9.5	479.045
10.0	477.258
10.5	475.113
11.0	472.968
11.5	470.823
12.0	468.320
12.5	466.175
13.0	463.315
13.5	461.170
14.0	458.310
14.5	455.808
15.0	452.948
15.5	450.088
16.0	447.586
16.5	444.726
17.0	442.581
17.5	439.721
18.0	436.861
18.5	434.001
19.0	430.426
19.5	426.493
20.0	422.561
20.5	418.628
21.0	413.981
21.5	409.333
22.0	403.971
22.5	398.608
23.0	392.531
23.5	386.096
24.0	378.946
24.5	371.439
25.0	363.931
25.5	356.066
26.0	347.844
26.5	339.371

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CANDELA TABULATION - (Cont.)

27.0	330.684
27.5	321.747
28.0	312.595
28.5	303.300
29.0	293.969
29.5	284.531
30.0	275.129
30.5	265.656
31.0	256.146
31.5	246.673
32.0	237.270
32.5	227.940
33.0	218.716
33.5	209.672
34.0	200.770
34.5	191.940
35.0	183.324
35.5	174.851
36.0	166.522
36.5	158.264
37.0	150.220
37.5	142.284
38.0	134.526
38.5	126.911
39.0	119.404
39.5	112.004
40.0	104.818
40.5	97.811
41.0	90.983
41.5	84.369
42.0	77.970
42.5	71.785
43.0	65.922
43.5	60.310
44.0	54.983
44.5	49.978
45.0	45.259
45.5	40.826
46.0	36.715
46.5	32.925
47.0	29.458
47.5	26.276
48.0	23.380
48.5	20.735
49.0	18.375
49.5	16.266
50.0	14.371
50.5	12.691
51.0	11.225
51.5	9.974
52.0	8.866
52.5	7.901
53.0	7.078
53.5	6.363
54.0	5.756
54.5	5.219

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CANDELA TABULATION - (Cont.)

55.0	4.755
55.5	4.397
56.0	4.075
56.5	3.825
57.0	3.611
57.5	3.396
58.0	3.182
58.5	2.967
59.0	2.788
59.5	2.574
60.0	2.431
60.5	2.252
61.0	2.109
61.5	1.966
62.0	1.823
62.5	1.716
63.0	1.609
63.5	1.501
64.0	1.394
64.5	1.323
65.0	1.215
65.5	1.144
66.0	1.072
66.5	1.001
67.0	0.929
67.5	0.894
68.0	0.822
68.5	0.786
69.0	0.715
69.5	0.679
70.0	0.643
70.5	0.608
71.0	0.572
71.5	0.536
72.0	0.500
72.5	0.465
73.0	0.429
73.5	0.429
74.0	0.393
74.5	0.357
75.0	0.322
75.5	0.322
76.0	0.286
76.5	0.286
77.0	0.250
77.5	0.250
78.0	0.214
78.5	0.214
79.0	0.214
79.5	0.179
80.0	0.179
80.5	0.143
81.0	0.143
81.5	0.143
82.0	0.143
82.5	0.107

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CANDELA TABULATION - (Cont.)

83.0	0.107
83.5	0.107
84.0	0.071
84.5	0.071
85.0	0.071
85.5	0.071
86.0	0.071
86.5	0.036
87.0	0.036
87.5	0.036
88.0	0.036
88.5	0.036
89.0	0.036
89.5	0.036
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
120.5	0.000
121.0	0.000
121.5	0.000
122.0	0.000
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123.5	0.000
124.0	0.000
124.5	0.000
125.0	0.000
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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133.5	0.000
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	173.91	N.A.	35.00
0-30	337.82	N.A.	68.00
0-40	452.22	N.A.	91.00
0-60	495.32	N.A.	99.60
0-80	497.00	N.A.	100.00
0-90	497.09	N.A.	100.00
10-90	450.59	N.A.	90.60
20-40	278.32	N.A.	56.00
20-50	316.17	N.A.	63.60
40-70	44.40	N.A.	8.90
60-80	1.68	N.A.	0.30
70-80	0.38	N.A.	0.10
80-90	0.09	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	497.09	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	46.50
10-20	127.41
20-30	163.92
30-40	114.40
40-50	37.85
50-60	5.24
60-70	1.30
70-80	0.38
80-90	0.09
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	103	101	101	99	98	97	96	95	93
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86
3	102	96	90	86	100	94	89	86	91	88	84	89	86	83	87	84	82	80
4	97	89	83	79	95	88	83	79	86	81	78	84	80	77	82	79	76	74
5	92	83	77	73	90	82	77	72	80	75	72	79	74	71	77	73	70	69
6	87	78	72	67	85	77	71	67	75	70	66	74	69	66	73	69	66	64
7	82	73	67	62	81	72	66	62	71	66	62	70	65	62	69	64	61	60
8	78	68	62	58	77	68	62	58	67	61	58	66	61	57	65	60	57	56
9	74	64	58	54	73	64	58	54	63	58	54	62	57	54	61	57	54	52
10	71	61	55	51	70	60	55	51	59	54	51	59	54	50	58	54	50	49

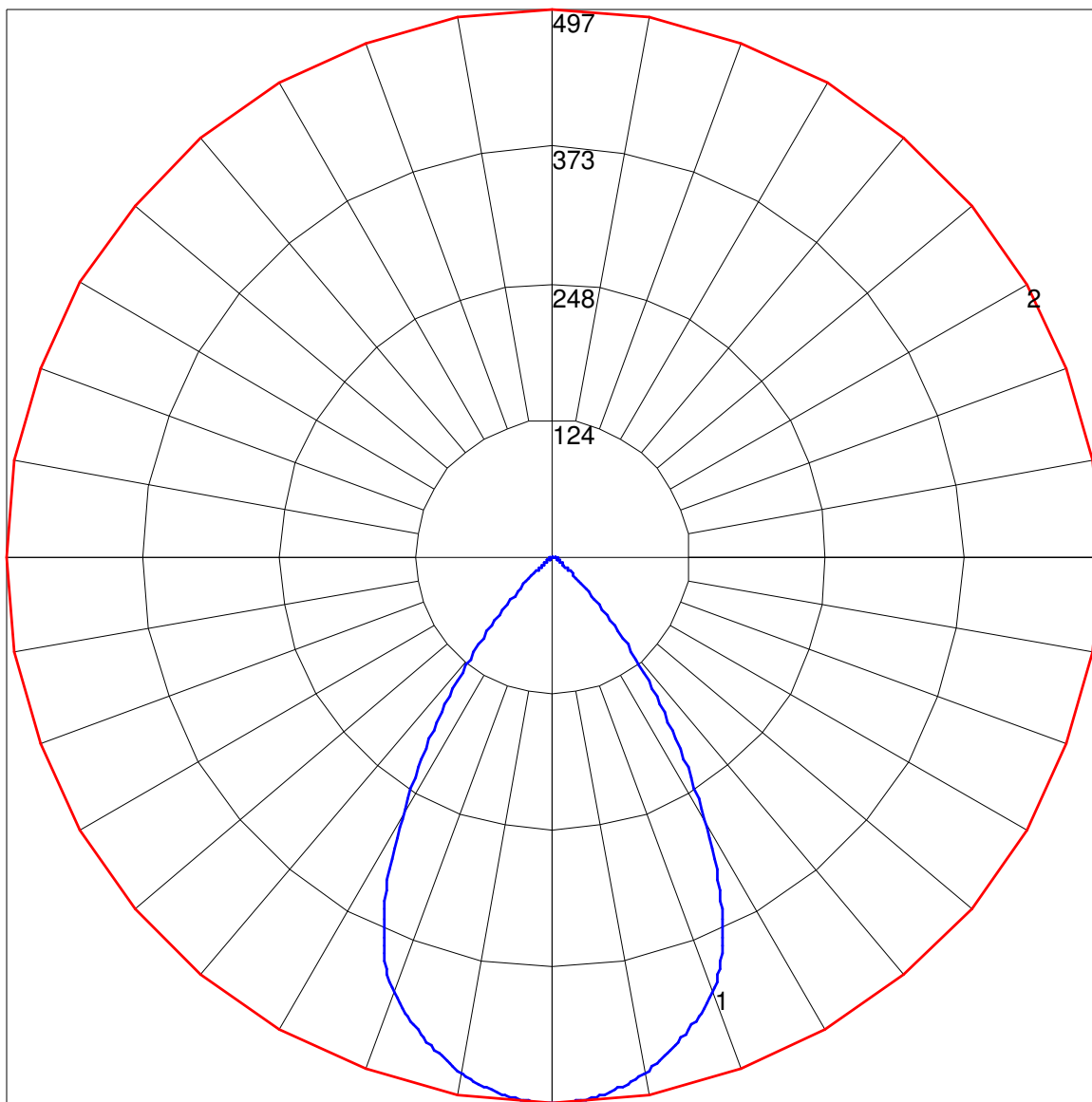
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UGR TABLE - CORRECTED

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	0.0	0.3	0.0	0.6	0.9	0.0	0.3	0.0	0.6	0.9
	3H	0.0	0.3	0.0	0.7	1.0	0.0	0.3	0.0	0.7	1.0
	4H	0.0	0.2	0.0	0.6	1.0	0.0	0.2	0.0	0.6	1.0
	6H	0.0	0.1	0.0	0.5	0.9	0.0	0.1	0.0	0.5	0.9
	8H	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.4	0.8
	12H	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.4	0.8
4H	2H	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.4	0.8
	3H	0.0	0.1	0.0	0.5	0.9	0.0	0.1	0.0	0.5	0.9
	4H	0.0	0.0	0.0	0.5	0.9	0.0	0.0	0.0	0.5	0.9
	6H	0.0	0.0	0.0	0.4	0.9	0.0	0.0	0.0	0.4	0.9
	8H	0.0	0.0	0.0	0.3	0.8	0.0	0.0	0.0	0.3	0.8
	12H	0.0	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.2	0.7
8H	4H	0.0	0.0	0.0	0.3	0.7	0.0	0.0	0.0	0.3	0.7
	6H	0.0	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.2	0.7
	8H	0.0	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.2	0.7
	12H	0.0	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.1	0.7
12H	4H	0.0	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.2	0.7
	6H	0.0	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.1	0.6
	8H	0.0	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.1	0.6

Maximum UGR = 1.0

POLAR GRAPH



Maximum Candela = 496.92 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.)