

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4CR-XX-L25-930-XXX-DIM-UNV-RW-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]GEN FROM 13257153.03
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 04/16/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 4CR-xx-L25-930-xxx-DIM-UNV-RW-CS-xx
[LUMINAIRE] Aluminum housing, optics, and trim enclosure
[LAMP] One white LED
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Downlight
[_SEARCH_MOUNTING] Pendant, Surface, Suspended, Wall

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1989
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	66
Total Luminaire Watts	30.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.88
Spacing Criterion (90-270)	0.88
Spacing Criterion (Diagonal)	0.80
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.21 ft (Diameter)
Luminous Width (90-270)	0.21 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	71305	71305	71305
55	56424	56424	56424
65	42177	42177	42177
75	21961	21961	21961
85	13308	13308	13308

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CANDELA TABULATION

	<u>0</u>
0.0	2370.183
0.5	2370.183
1.0	2368.962
1.5	2367.740
2.0	2367.740
2.5	2365.296
3.0	2361.631
3.5	2356.744
4.0	2351.857
4.5	2346.970
5.0	2339.640
5.5	2333.531
6.0	2326.200
6.5	2317.648
7.0	2309.096
7.5	2300.544
8.0	2291.992
8.5	2282.218
9.0	2271.222
9.5	2261.448
10.0	2250.452
10.5	2238.235
11.0	2224.796
11.5	2211.357
12.0	2196.696
12.5	2182.035
13.0	2166.152
13.5	2149.048
14.0	2130.721
14.5	2112.395
15.0	2091.626
15.5	2070.856
16.0	2047.643
16.5	2024.430
17.0	1999.995
17.5	1974.338
18.0	1947.460
18.5	1918.138
19.0	1887.594
19.5	1854.607
20.0	1820.398
20.5	1784.968
21.0	1747.094
21.5	1707.998
22.0	1665.237
22.5	1622.476
23.0	1577.271
23.5	1530.845
24.0	1481.975
24.5	1433.106
25.0	1383.014
25.5	1330.479
26.0	1276.722
26.5	1222.966

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CANDELA TABULATION - (Cont.)

27.0	1169.575
27.5	1115.941
28.0	1061.818
28.5	1007.939
29.0	952.838
29.5	897.371
30.0	842.392
30.5	788.269
31.0	734.879
31.5	683.321
32.0	633.719
32.5	586.804
33.0	543.310
33.5	502.992
34.0	465.484
34.5	431.153
35.0	399.999
35.5	371.410
36.0	345.509
36.5	322.296
37.0	301.649
37.5	283.200
38.0	266.462
38.5	251.557
39.0	238.484
39.5	227.000
40.0	216.737
40.5	207.819
41.0	199.877
41.5	192.791
42.0	186.438
42.5	180.818
43.0	175.687
43.5	171.166
44.0	166.890
44.5	162.981
45.0	159.315
45.5	155.772
46.0	152.474
46.5	149.175
47.0	146.121
47.5	143.066
48.0	140.012
48.5	137.080
49.0	134.147
49.5	131.215
50.0	128.405
50.5	125.717
51.0	122.907
51.5	120.220
52.0	117.654
52.5	114.966
53.0	112.400
53.5	109.835
54.0	107.269
54.5	104.703

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CANDELA TABULATION - (Cont.)

55.0	102.260
55.5	99.816
56.0	97.373
56.5	94.930
57.0	92.486
57.5	90.165
58.0	87.721
58.5	85.400
59.0	83.079
59.5	80.879
60.0	78.558
60.5	76.237
61.0	73.916
61.5	71.716
62.0	69.395
62.5	67.196
63.0	64.997
63.5	62.798
64.0	60.598
64.5	58.399
65.0	56.322
65.5	54.245
66.0	52.168
66.5	49.969
67.0	48.015
67.5	46.060
68.0	43.983
68.5	42.028
69.0	40.073
69.5	38.118
70.0	36.286
70.5	34.331
71.0	32.498
71.5	30.544
72.0	28.711
72.5	26.878
73.0	25.046
73.5	23.213
74.0	21.503
74.5	19.670
75.0	17.960
75.5	16.371
76.0	14.783
76.5	13.561
77.0	12.462
77.5	11.484
78.0	10.751
78.5	10.140
79.0	9.652
79.5	9.163
80.0	8.552
80.5	8.064
81.0	7.575
81.5	7.086
82.0	6.475
82.5	5.987

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CANDELA TABULATION - (Cont.)

83.0	5.620
83.5	5.131
84.0	4.643
84.5	4.154
85.0	3.665
85.5	3.299
86.0	2.810
86.5	2.443
87.0	1.955
87.5	1.588
88.0	1.222
88.5	0.855
89.0	0.489
89.5	0.367
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
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122.0	0.000
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123.0	0.000
123.5	0.000
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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
130.5	0.000
131.0	0.000
131.5	0.000
132.0	0.000
132.5	0.000
133.0	0.000
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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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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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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Zone	Lumens	%Lamp	%Fixt
0-20	801.67	N.A.	40.30
0-30	1419.16	N.A.	71.40
0-40	1690.86	N.A.	85.00
0-60	1908.03	N.A.	95.90
0-80	1984.58	N.A.	99.80
0-90	1988.81	N.A.	100.00
10-90	1768.34	N.A.	88.90
20-40	889.19	N.A.	44.70
20-50	1014.71	N.A.	51.00
40-70	273.15	N.A.	13.70
60-80	76.55	N.A.	3.80
70-80	20.57	N.A.	1.00
80-90	4.23	N.A.	0.20
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	1988.81	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	220.47
10-20	581.20
20-30	617.49
30-40	271.70
40-50	125.52
50-60	91.65
60-70	55.98
70-80	20.57
80-90	4.23
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	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	79
4	96	88	82	78	94	87	81	77	84	80	76	82	78	75	81	77	74	73
5	91	82	76	72	89	81	75	71	79	74	71	78	73	70	76	72	69	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	81	72	66	62	71	65	61	69	65	61	68	64	61	59
8	78	68	62	58	77	68	62	58	67	61	58	66	61	57	65	60	57	56
9	75	65	59	55	73	64	58	55	63	58	54	62	58	54	61	57	54	53
10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50

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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

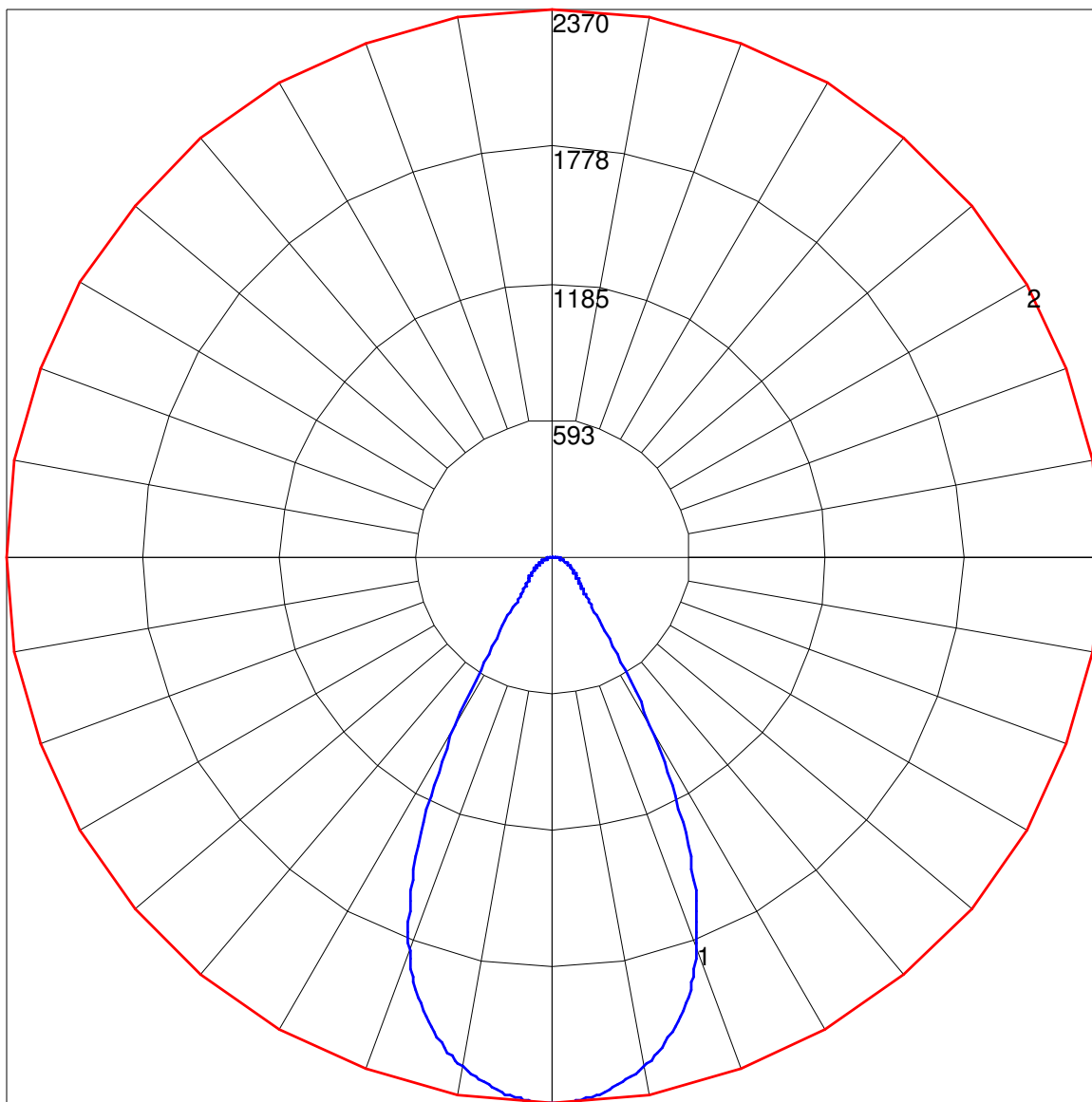
X=2H	Y=2H	21.3	22.4	21.7	22.7	23.0	21.3	22.4	21.7	22.7	23.0
	3H	22.3	23.3	22.7	23.6	24.0	22.3	23.3	22.7	23.6	24.0
	4H	22.5	23.4	22.9	23.8	24.2	22.5	23.4	22.9	23.8	24.2
	6H	22.6	23.4	23.0	23.8	24.2	22.6	23.4	23.0	23.8	24.2
	8H	22.5	23.3	23.0	23.7	24.1	22.5	23.3	23.0	23.7	24.1
	12H	22.5	23.3	23.0	23.7	24.1	22.5	23.3	23.0	23.7	24.1

UGR Viewed Endwise

4H	2H	21.6	22.5	22.0	22.9	23.3	21.6	22.5	22.0	22.9	23.3
	3H	22.8	23.5	23.2	24.0	24.4	22.8	23.5	23.2	24.0	24.4
	4H	23.0	23.7	23.5	24.1	24.6	23.0	23.7	23.5	24.1	24.6
	6H	23.1	23.7	23.6	24.1	24.6	23.1	23.7	23.6	24.1	24.6
	8H	23.1	23.6	23.6	24.1	24.6	23.1	23.6	23.6	24.1	24.6
	12H	23.1	23.6	23.6	24.1	24.5	23.1	23.6	23.6	24.1	24.5
8H	4H	23.0	23.6	23.5	24.0	24.5	23.0	23.6	23.5	24.0	24.5
	6H	23.2	23.6	23.7	24.1	24.6	23.2	23.6	23.7	24.1	24.6
	8H	23.2	23.6	23.7	24.1	24.6	23.2	23.6	23.7	24.1	24.6
	12H	23.2	23.5	23.7	24.0	24.6	23.2	23.5	23.7	24.0	24.6
12H	4H	23.0	23.5	23.5	23.9	24.4	23.0	23.5	23.5	23.9	24.4
	6H	23.1	23.5	23.7	24.0	24.5	23.1	23.5	23.7	24.0	24.5
	8H	23.2	23.5	23.7	24.0	24.6	23.2	23.5	23.7	24.0	24.6

Maximum UGR = 24.6

POLAR GRAPH



Maximum Candela = 2370.183 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.)