

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4CR-XX-L25-830-XXX-DIM-UNV-RM-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 13257153.03
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 07/16/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 4CR-xx-L25-830-xxx-DIM-UNV-RM-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	2349
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
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	84212	84212	84212
55	66637	66637	66637
65	49812	49812	49812
75	25937	25937	25937
85	15719	15719	15719

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CANDELA TABULATION

	<u>0</u>
0.0	2799.226
0.5	2799.226
1.0	2797.783
1.5	2796.340
2.0	2796.340
2.5	2793.454
3.0	2789.126
3.5	2783.354
4.0	2777.582
4.5	2771.811
5.0	2763.153
5.5	2755.939
6.0	2747.281
6.5	2737.181
7.0	2727.081
7.5	2716.981
8.0	2706.880
8.5	2695.337
9.0	2682.351
9.5	2670.808
10.0	2657.822
10.5	2643.393
11.0	2627.521
11.5	2611.649
12.0	2594.334
12.5	2577.019
13.0	2558.262
13.5	2538.061
14.0	2516.417
14.5	2494.774
15.0	2470.245
15.5	2445.715
16.0	2418.300
16.5	2390.885
17.0	2362.027
17.5	2331.726
18.0	2299.983
18.5	2265.353
19.0	2229.280
19.5	2190.322
20.0	2149.921
20.5	2108.077
21.0	2063.347
21.5	2017.174
22.0	1966.673
22.5	1916.171
23.0	1862.784
23.5	1807.954
24.0	1750.238
24.5	1692.522
25.0	1633.363
25.5	1571.318
26.0	1507.830
26.5	1444.343

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CANDELA TABULATION - (Cont.)

27.0	1381.288
27.5	1317.945
28.0	1254.024
28.5	1190.392
29.0	1125.318
29.5	1059.810
30.0	994.880
30.5	930.959
31.0	867.904
31.5	807.014
32.0	748.432
32.5	693.025
33.0	641.658
33.5	594.042
34.0	549.745
34.5	509.199
35.0	472.405
35.5	438.642
36.0	408.052
36.5	380.637
37.0	356.252
37.5	334.464
38.0	314.696
38.5	297.093
39.0	281.654
39.5	268.091
40.0	255.970
40.5	245.437
41.0	236.058
41.5	227.690
42.0	220.187
42.5	213.549
43.0	207.489
43.5	202.150
44.0	197.100
44.5	192.483
45.0	188.154
45.5	183.970
46.0	180.074
46.5	176.178
47.0	172.571
47.5	168.964
48.0	165.356
48.5	161.893
49.0	158.430
49.5	154.967
50.0	151.649
50.5	148.474
51.0	145.156
51.5	141.981
52.0	138.951
52.5	135.777
53.0	132.747
53.5	129.717
54.0	126.687
54.5	123.657

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CANDELA TABULATION - (Cont.)

55.0	120.771
55.5	117.885
56.0	114.999
56.5	112.113
57.0	109.228
57.5	106.486
58.0	103.600
58.5	100.859
59.0	98.117
59.5	95.520
60.0	92.778
60.5	90.037
61.0	87.295
61.5	84.698
62.0	81.957
62.5	79.359
63.0	76.762
63.5	74.165
64.0	71.568
64.5	68.971
65.0	66.518
65.5	64.065
66.0	61.612
66.5	59.015
67.0	56.706
67.5	54.397
68.0	51.944
68.5	49.636
69.0	47.327
69.5	45.018
70.0	42.854
70.5	40.545
71.0	38.381
71.5	36.072
72.0	33.908
72.5	31.744
73.0	29.579
73.5	27.415
74.0	25.395
74.5	23.231
75.0	21.211
75.5	19.335
76.0	17.459
76.5	16.016
77.0	14.718
77.5	13.563
78.0	12.698
78.5	11.976
79.0	11.399
79.5	10.822
80.0	10.100
80.5	9.523
81.0	8.946
81.5	8.369
82.0	7.647
82.5	7.070

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CANDELA TABULATION - (Cont.)

83.0	6.637
83.5	6.060
84.0	5.483
84.5	4.906
85.0	4.329
85.5	3.896
86.0	3.319
86.5	2.886
87.0	2.309
87.5	1.876
88.0	1.443
88.5	1.010
89.0	0.577
89.5	0.433
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
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120.5	0.000
121.0	0.000
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122.0	0.000
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124.5	0.000
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125.5	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
145.5	0.000
146.0	0.000
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153.0	0.000
153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
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156.5	0.000
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158.0	0.000
158.5	0.000
159.0	0.000
159.5	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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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	946.79	N.A.	40.30
0-30	1676.06	N.A.	71.40
0-40	1996.93	N.A.	85.00
0-60	2253.42	N.A.	95.90
0-80	2343.83	N.A.	99.80
0-90	2348.82	N.A.	100.00
10-90	2088.44	N.A.	88.90
20-40	1050.15	N.A.	44.70
20-50	1198.39	N.A.	51.00
40-70	322.60	N.A.	13.70
60-80	90.40	N.A.	3.80
70-80	24.29	N.A.	1.00
80-90	4.99	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	2348.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	260.37
10-20	686.41
20-30	729.27
30-40	320.88
40-50	148.25
50-60	108.24
60-70	66.11
70-80	24.29
80-90	4.99
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	109	109	109	109	106	106	106	106	102	102	102	97	97	97	93	93	93	91
1	103	101	98	96	101	99	96	94	95	93	91	91	90	89	88	87	86	84
2	98	93	89	86	96	91	88	85	88	85	83	86	83	81	83	81	79	78
3	92	86	81	78	91	85	80	77	83	79	76	80	77	74	78	76	73	72
4	88	80	75	71	86	79	74	70	77	73	70	75	72	69	74	71	68	67
5	83	75	70	65	82	74	69	65	73	68	64	71	67	64	70	66	63	62
6	79	70	65	61	78	70	64	60	68	64	60	67	63	60	66	62	59	58
7	75	66	61	57	74	66	60	56	64	60	56	63	59	56	62	58	56	54
8	71	63	57	53	70	62	57	53	61	56	53	60	56	53	59	55	52	51
9	68	59	54	50	67	59	53	50	58	53	50	57	53	49	56	52	49	48
10	65	56	51	47	64	56	51	47	55	50	47	54	50	47	54	50	47	45

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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	22.2	23.3	22.6	23.6	23.9	22.2	23.3	22.6	23.6	23.9
	3H	23.2	24.2	23.6	24.5	24.9	23.2	24.2	23.6	24.5	24.9
	4H	23.4	24.3	23.8	24.7	25.1	23.4	24.3	23.8	24.7	25.1
	6H	23.4	24.3	23.9	24.7	25.1	23.4	24.3	23.9	24.7	25.1
	8H	23.4	24.2	23.9	24.6	25.0	23.4	24.2	23.9	24.6	25.0
	12H	23.4	24.2	23.9	24.6	25.0	23.4	24.2	23.9	24.6	25.0

UGR Viewed Endwise

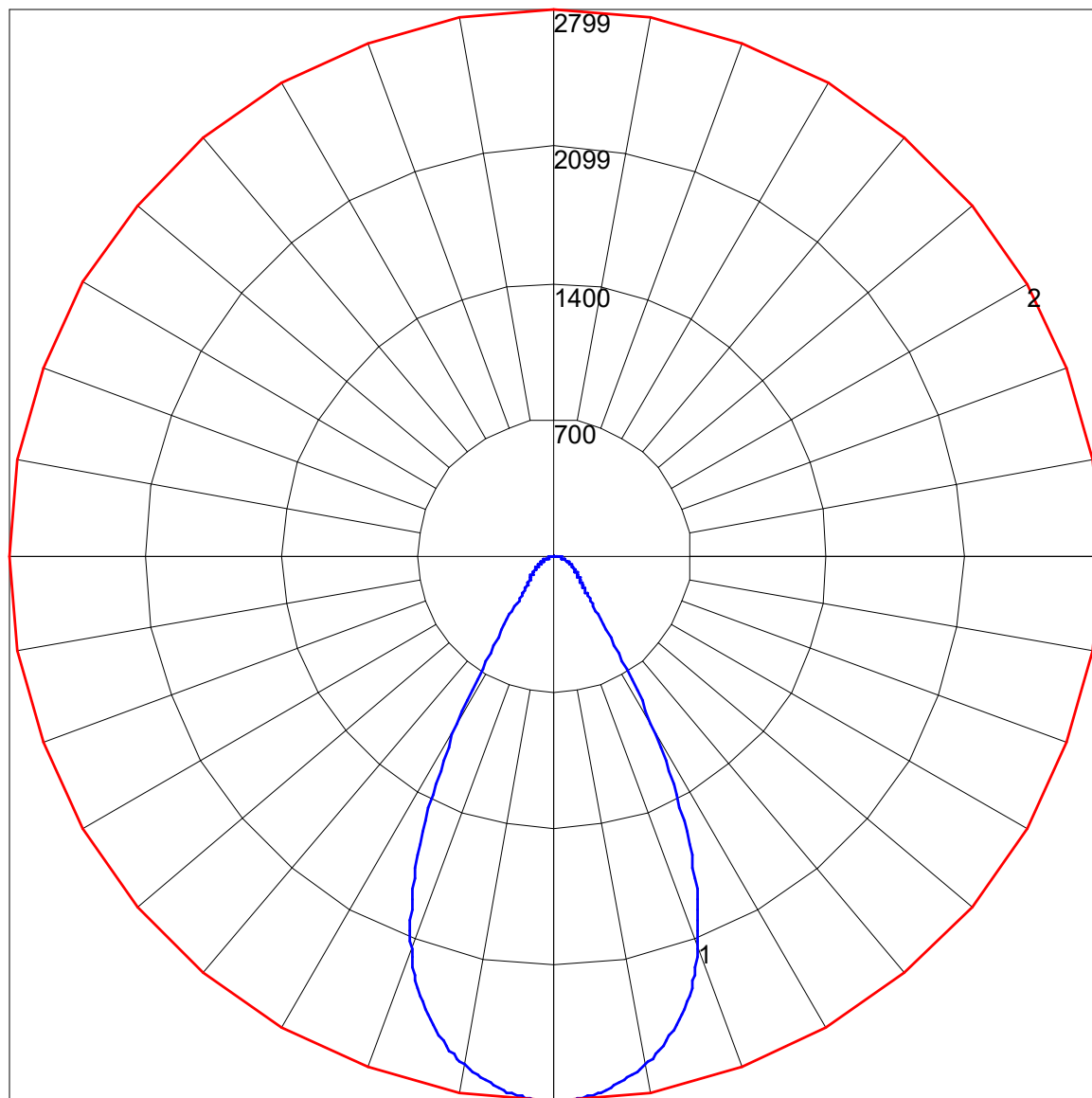
4H	2H	22.5	23.4	22.9	23.8	24.2	22.5	23.4	22.9	23.8	24.2
	3H	23.7	24.4	24.1	24.9	25.3	23.7	24.4	24.1	24.9	25.3
	4H	23.9	24.6	24.4	25.0	25.5	23.9	24.6	24.4	25.0	25.5
	6H	24.0	24.6	24.5	25.0	25.5	24.0	24.6	24.5	25.0	25.5
	8H	24.0	24.5	24.5	25.0	25.5	24.0	24.5	24.5	25.0	25.5
	12H	24.0	24.5	24.5	25.0	25.4	24.0	24.5	24.5	25.0	25.4

8H	4H	23.9	24.5	24.4	24.9	25.4	23.9	24.5	24.4	24.9	25.4
	6H	24.1	24.5	24.6	25.0	25.5	24.1	24.5	24.6	25.0	25.5
	8H	24.1	24.5	24.6	25.0	25.5	24.1	24.5	24.6	25.0	25.5
	12H	24.1	24.4	24.6	24.9	25.5	24.1	24.4	24.6	24.9	25.5

12H	4H	23.9	24.4	24.4	24.8	25.3	23.9	24.4	24.4	24.8	25.3
	6H	24.0	24.4	24.6	24.9	25.4	24.0	24.4	24.6	24.9	25.4
	8H	24.1	24.4	24.6	24.9	25.5	24.1	24.4	24.6	24.9	25.5

Maximum UGR = 25.5

POLAR GRAPH



Maximum Candela = 2799.226 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.)