



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4CR-XX-L7-840-XXX-DIM-UNV-OM-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 13131414.06
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 04-26-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO. 64836
 [LUMCAT] 4CR-xx-L7-840-xxx-DIM-UNV-OM-CS-xx
 [LUMINAIRE] Aluminum cylinder housing and reflector, no lens enclosure
 [LAMP] One white LED
 [SEARCH_SOURCETYPE] LED
 [SEARCH_APPLICATION] Indoor, Downlight
 [SEARCH_MOUNTING] Surface, Suspended, Wall

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	707
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	81
Total Luminaire Watts	8.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.66
Spacing Criterion (90-270)	0.66
Spacing Criterion (Diagonal)	0.66
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	4875	4875	4875
55	1466	1466	1466
65	486	486	486
75	216	216	216
85	109	109	109

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CANDELA TABULATION

	<u>0</u>
0.0	1595.547
0.5	1595.547
1.0	1595.252
1.5	1594.956
2.0	1594.956
2.5	1592.595
3.0	1588.462
3.5	1584.329
4.0	1579.311
4.5	1574.292
5.0	1568.389
5.5	1560.123
6.0	1549.791
6.5	1534.441
7.0	1516.434
7.5	1497.836
8.0	1477.763
8.5	1455.328
9.0	1431.121
9.5	1405.734
10.0	1378.871
10.5	1350.827
11.0	1321.898
11.5	1292.673
12.0	1263.153
12.5	1233.043
13.0	1203.228
13.5	1173.708
14.0	1145.074
14.5	1117.030
15.0	1089.282
15.5	1061.828
16.0	1034.375
16.5	1006.921
17.0	979.763
17.5	952.900
18.0	926.332
18.5	900.060
19.0	872.901
19.5	845.448
20.0	817.109
20.5	788.475
21.0	759.250
21.5	729.435
22.0	699.030
22.5	667.148
23.0	634.381
23.5	600.729
24.0	565.895
24.5	530.471
25.0	494.457
25.5	457.853
26.0	421.248
26.5	384.348

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4CR-XX-L7-840-XXX-DIM-UNV-OM-CS-XX_.IES****CANDELA TABULATION - (Cont.)**

27.0	348.039
27.5	312.615
28.0	278.933
28.5	246.550
29.0	216.764
29.5	189.340
30.0	164.603
30.5	141.902
31.0	121.474
31.5	103.201
32.0	87.703
32.5	74.538
33.0	63.674
33.5	54.671
34.0	47.320
34.5	41.210
35.0	36.487
35.5	32.944
36.0	30.228
36.5	28.073
37.0	26.125
37.5	24.354
38.0	22.789
38.5	21.461
39.0	20.251
39.5	19.158
40.0	18.155
40.5	17.240
41.0	16.384
41.5	15.557
42.0	14.789
42.5	14.081
43.0	13.402
43.5	12.753
44.0	12.133
44.5	11.542
45.0	10.893
45.5	10.243
46.0	9.653
46.5	9.092
47.0	8.590
47.5	8.059
48.0	7.587
48.5	7.114
49.0	6.671
49.5	6.258
50.0	5.815
50.5	5.402
51.0	4.989
51.5	4.576
52.0	4.192
52.5	3.897
53.0	3.631
53.5	3.365
54.0	3.100
54.5	2.893

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CANDELA TABULATION - (Cont.)

55.0	2.657
55.5	2.450
56.0	2.273
56.5	2.066
57.0	1.889
57.5	1.771
58.0	1.653
58.5	1.535
59.0	1.417
59.5	1.328
60.0	1.240
60.5	1.181
61.0	1.092
61.5	1.033
62.0	0.974
62.5	0.915
63.0	0.856
63.5	0.797
64.0	0.738
64.5	0.708
65.0	0.649
65.5	0.620
66.0	0.590
66.5	0.561
67.0	0.502
67.5	0.472
68.0	0.443
68.5	0.413
69.0	0.413
69.5	0.384
70.0	0.354
70.5	0.325
71.0	0.295
71.5	0.295
72.0	0.266
72.5	0.266
73.0	0.236
73.5	0.207
74.0	0.207
74.5	0.177
75.0	0.177
75.5	0.177
76.0	0.148
76.5	0.148
77.0	0.148
77.5	0.118
78.0	0.118
78.5	0.118
79.0	0.089
79.5	0.089
80.0	0.089
80.5	0.089
81.0	0.059
81.5	0.059
82.0	0.059
82.5	0.059

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CANDELA TABULATION - (Cont.)

83.0	0.059
83.5	0.030
84.0	0.030
84.5	0.030
85.0	0.030
85.5	0.030
86.0	0.030
86.5	0.030
87.0	0.030
87.5	0.030
88.0	0.030
88.5	0.030
89.0	0.000
89.5	0.000
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
122.5	0.000
123.0	0.000
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
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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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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Zone	Lumens	%Lamp	%Fixt
0-20	445.06	N.A.	62.90
0-30	662.41	N.A.	93.70
0-40	695.00	N.A.	98.30
0-60	706.13	N.A.	99.90
0-80	707.03	N.A.	100.00
0-90	707.07	N.A.	100.00
10-90	563.34	N.A.	79.70
20-40	249.94	N.A.	35.30
20-50	258.48	N.A.	36.60
40-70	11.82	N.A.	1.70
60-80	0.90	N.A.	0.10
70-80	0.20	N.A.	0.00
80-90	0.04	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	707.07	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	143.73
10-20	301.33
20-30	217.35
30-40	32.59
40-50	8.54
50-60	2.59
60-70	0.70
70-80	0.20
80-90	0.04
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

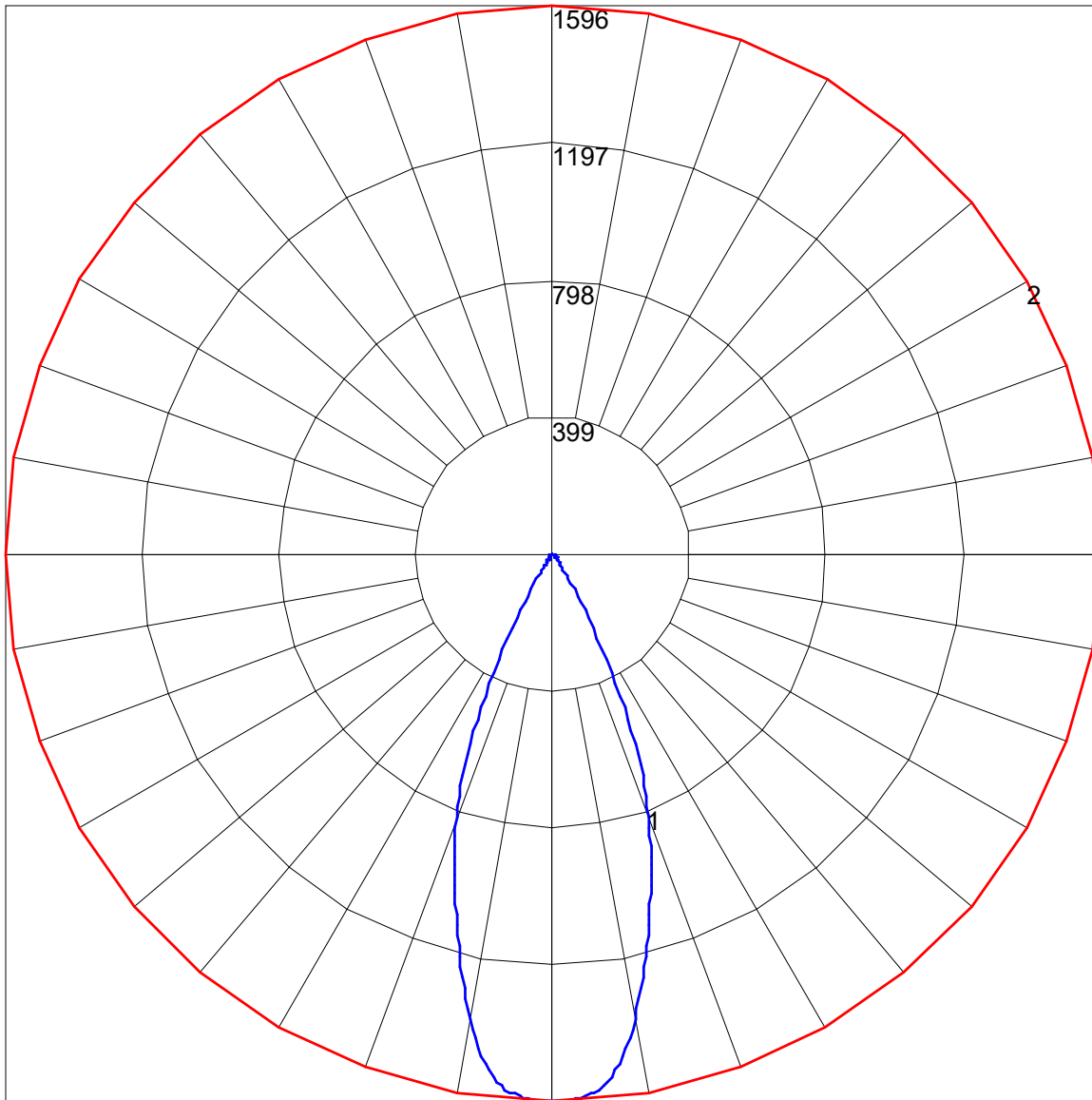
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91
3	106	101	97	93	104	99	96	93	97	94	91	94	92	90	92	90	88	87
4	102	96	91	88	100	95	91	87	93	89	86	91	88	85	89	86	84	83
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79
6	94	87	82	79	93	87	82	79	85	81	78	84	80	78	83	80	77	76
7	91	84	79	75	90	83	78	75	82	78	75	81	77	74	80	76	74	73
8	88	80	75	72	87	80	75	72	79	75	72	78	74	71	77	74	71	70
9	85	77	72	69	84	77	72	69	76	72	69	75	71	68	74	71	68	67
10	82	74	69	66	81	74	69	66	73	69	66	72	68	66	72	68	66	65

POLAR GRAPH



Maximum Candela = 1595.547 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.)