



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-L10-827-XXX-DIM-UNV-OM-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.04

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 2-FEB-2021

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMCAT] 8CR-TL-L10-827-xxx-DIM-UNV-OM-CS-xx

[LUMINAIRE] 8" DIA. SURFACE CYLINDER

[LAMP] One white LED

[_SEARCH_SOURCE TYPE] LED

[_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Healthcare, Office, Downlight

[_SEARCH_MOUNTING] Surface

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	903
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	8.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.58
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.68
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 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	1629	1629	1629
55	600	600	600
65	236	236	236
75	106	106	106
85	86	86	86

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CANDELA TABULATION

	<u>0</u>
0.0	1827.403
0.5	1830.135
1.0	1835.599
1.5	1838.787
2.0	1846.528
2.5	1849.716
3.0	1855.180
3.5	1856.546
4.0	1852.448
4.5	1830.590
5.0	1808.732
5.5	1785.508
6.0	1748.168
6.5	1710.828
7.0	1671.210
7.5	1626.584
8.0	1574.672
8.5	1521.393
9.0	1466.294
9.5	1412.560
10.0	1362.924
10.5	1319.209
11.0	1281.413
11.5	1249.082
12.0	1217.206
12.5	1185.785
13.0	1155.731
13.5	1127.498
14.0	1101.997
14.5	1079.229
15.0	1058.737
15.5	1039.156
16.0	1020.030
16.5	999.994
17.0	979.502
17.5	959.011
18.0	940.340
18.5	923.947
19.0	907.098
19.5	889.794
20.0	870.669
20.5	850.177
21.0	829.230
21.5	807.828
22.0	785.059
22.5	763.201
23.0	739.977
23.5	716.298
24.0	691.708
24.5	667.118
25.0	642.983
25.5	618.849
26.0	596.536
26.5	575.133

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CANDELA TABULATION - (Cont.)

27.0	555.097
27.5	535.971
28.0	518.667
28.5	503.185
29.0	488.613
29.5	474.496
30.0	456.737
30.5	434.515
31.0	409.014
31.5	380.963
32.0	352.502
32.5	323.860
33.0	295.217
33.5	265.162
34.0	234.653
34.5	206.829
35.0	180.099
35.5	154.872
36.0	130.600
36.5	108.879
37.0	91.074
37.5	78.551
38.0	71.812
38.5	67.258
39.0	62.705
39.5	57.878
40.0	52.732
40.5	47.267
41.0	42.031
41.5	37.158
42.0	33.014
42.5	29.736
43.0	27.186
43.5	25.228
44.0	23.588
44.5	22.268
45.0	21.038
45.5	19.991
46.0	18.989
46.5	18.078
47.0	17.167
47.5	16.302
48.0	15.437
48.5	14.572
49.0	13.707
49.5	12.933
50.0	12.204
50.5	11.475
51.0	10.792
51.5	10.109
52.0	9.426
52.5	8.834
53.0	8.242
53.5	7.696
54.0	7.195
54.5	6.739

CANDELA TABULATION - (Cont.)

55.0	6.284
55.5	5.920
56.0	5.510
56.5	5.191
57.0	4.872
57.5	4.554
58.0	4.280
58.5	4.007
59.0	3.780
59.5	3.552
60.0	3.324
60.5	3.097
61.0	2.914
61.5	2.732
62.0	2.596
62.5	2.459
63.0	2.277
63.5	2.186
64.0	2.049
64.5	1.913
65.0	1.821
65.5	1.685
66.0	1.594
66.5	1.503
67.0	1.412
67.5	1.321
68.0	1.275
68.5	1.184
69.0	1.093
69.5	1.047
70.0	1.002
70.5	0.911
71.0	0.865
71.5	0.820
72.0	0.774
72.5	0.729
73.0	0.683
73.5	0.638
74.0	0.592
74.5	0.546
75.0	0.501
75.5	0.501
76.0	0.455
76.5	0.410
77.0	0.410
77.5	0.364
78.0	0.364
78.5	0.319
79.0	0.319
79.5	0.273
80.0	0.273
80.5	0.228
81.0	0.228
81.5	0.228
82.0	0.182
82.5	0.182

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CANDELA TABULATION - (Cont.)

83.0	0.182
83.5	0.137
84.0	0.137
84.5	0.137
85.0	0.137
85.5	0.091
86.0	0.091
86.5	0.091
87.0	0.091
87.5	0.091
88.0	0.046
88.5	0.046
89.0	0.046
89.5	0.046
90.0	0.046
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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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	455.72	N.A.	50.50
0-30	750.92	N.A.	83.20
0-40	875.83	N.A.	97.00
0-60	900.38	N.A.	99.70
0-80	902.85	N.A.	100.00
0-90	902.99	N.A.	100.00
10-90	745.54	N.A.	82.60
20-40	420.11	N.A.	46.50
20-50	438.63	N.A.	48.60
40-70	26.43	N.A.	2.90
60-80	2.47	N.A.	0.30
70-80	0.58	N.A.	0.10
80-90	0.14	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	902.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	157.45
10-20	298.27
20-30	295.20
30-40	124.92
40-50	18.52
50-60	6.03
60-70	1.89
70-80	0.58
80-90	0.14
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

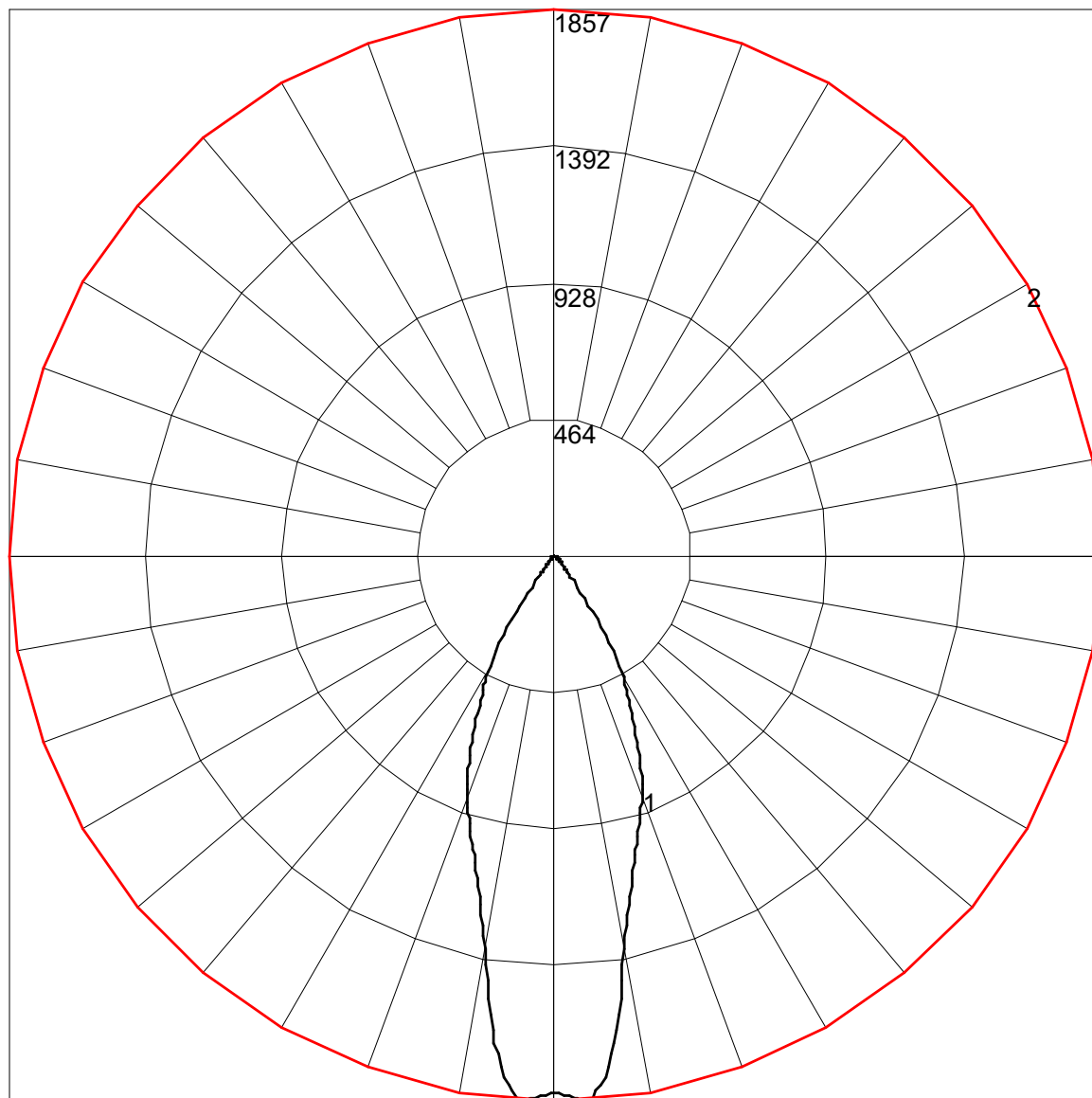
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84
4	100	93	88	84	98	92	88	84	90	86	83	88	85	82	86	83	81	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	75	73	72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	75	72	69	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	65	63	62
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59

POLAR GRAPH



Maximum Candela = 1856.546 Located At Horizontal Angle = 0, Vertical Angle = 3.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (3.5) (Through Max. Cd.)