



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-L10-835-XXX-DIM-UNV-OM-SG-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.04

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 3-FEB-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 8CR-TL-L10-835-xxx-DIM-UNV-OM-SG-xx

[LUMINAIRE] 8" DIA. SURFACE CYLINDER

[LAMP] One white LED

[_SEARCH_SOURCETYPE] 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	1630	1630	1630
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	1828.293
0.5	1831.026
1.0	1836.493
1.5	1839.683
2.0	1847.428
2.5	1850.617
3.0	1856.084
3.5	1857.451
4.0	1853.350
4.5	1831.482
5.0	1809.613
5.5	1786.378
6.0	1749.020
6.5	1711.661
7.0	1672.025
7.5	1627.376
8.0	1575.439
8.5	1522.135
9.0	1467.008
9.5	1413.248
10.0	1363.588
10.5	1319.852
11.0	1282.037
11.5	1249.690
12.0	1217.799
12.5	1186.363
13.0	1156.294
13.5	1128.047
14.0	1102.534
14.5	1079.754
15.0	1059.253
15.5	1039.662
16.0	1020.527
16.5	1000.481
17.0	979.979
17.5	959.478
18.0	940.799
18.5	924.397
19.0	907.540
19.5	890.228
20.0	871.093
20.5	850.591
21.0	829.634
21.5	808.221
22.0	785.441
22.5	763.573
23.0	740.338
23.5	716.647
24.0	692.045
24.5	667.443
25.0	643.297
25.5	619.150
26.0	596.826
26.5	575.413

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CANDELA TABULATION - (Cont.)

27.0	555.367
27.5	536.232
28.0	518.920
28.5	503.430
29.0	488.851
29.5	474.727
30.0	456.959
30.5	434.726
31.0	409.213
31.5	381.149
32.0	352.674
32.5	324.017
33.0	295.361
33.5	265.292
34.0	234.767
34.5	206.930
35.0	180.187
35.5	154.947
36.0	130.664
36.5	108.932
37.0	91.119
37.5	78.590
38.0	71.847
38.5	67.291
39.0	62.735
39.5	57.906
40.0	52.758
40.5	47.291
41.0	42.051
41.5	37.176
42.0	33.030
42.5	29.750
43.0	27.199
43.5	25.240
44.0	23.600
44.5	22.278
45.0	21.048
45.5	20.001
46.0	18.998
46.5	18.087
47.0	17.176
47.5	16.310
48.0	15.445
48.5	14.579
49.0	13.713
49.5	12.939
50.0	12.210
50.5	11.481
51.0	10.798
51.5	10.114
52.0	9.431
52.5	8.838
53.0	8.246
53.5	7.700
54.0	7.198
54.5	6.743

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CANDELA TABULATION - (Cont.)

55.0	6.287
55.5	5.923
56.0	5.513
56.5	5.194
57.0	4.875
57.5	4.556
58.0	4.283
58.5	4.009
59.0	3.781
59.5	3.554
60.0	3.326
60.5	3.098
61.0	2.916
61.5	2.734
62.0	2.597
62.5	2.460
63.0	2.278
63.5	2.187
64.0	2.050
64.5	1.913
65.0	1.822
65.5	1.686
66.0	1.595
66.5	1.503
67.0	1.412
67.5	1.321
68.0	1.276
68.5	1.185
69.0	1.093
69.5	1.048
70.0	1.002
70.5	0.911
71.0	0.866
71.5	0.820
72.0	0.775
72.5	0.729
73.0	0.683
73.5	0.638
74.0	0.592
74.5	0.547
75.0	0.501
75.5	0.501
76.0	0.456
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
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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

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
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146.5	0.000
147.0	0.000
147.5	0.000
148.0	0.000
148.5	0.000
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149.5	0.000
150.0	0.000
150.5	0.000
151.0	0.000
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152.0	0.000
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153.0	0.000
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159.5	0.000
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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

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	455.94	N.A.	50.50
0-30	751.28	N.A.	83.20
0-40	876.26	N.A.	97.00
0-60	900.82	N.A.	99.70
0-80	903.29	N.A.	100.00
0-90	903.43	N.A.	100.00
10-90	745.90	N.A.	82.60
20-40	420.32	N.A.	46.50
20-50	438.84	N.A.	48.60
40-70	26.45	N.A.	2.90
60-80	2.47	N.A.	0.30
70-80	0.59	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	903.43	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	157.53
10-20	298.41
20-30	295.34
30-40	124.98
40-50	18.53
50-60	6.03
60-70	1.89
70-80	0.59
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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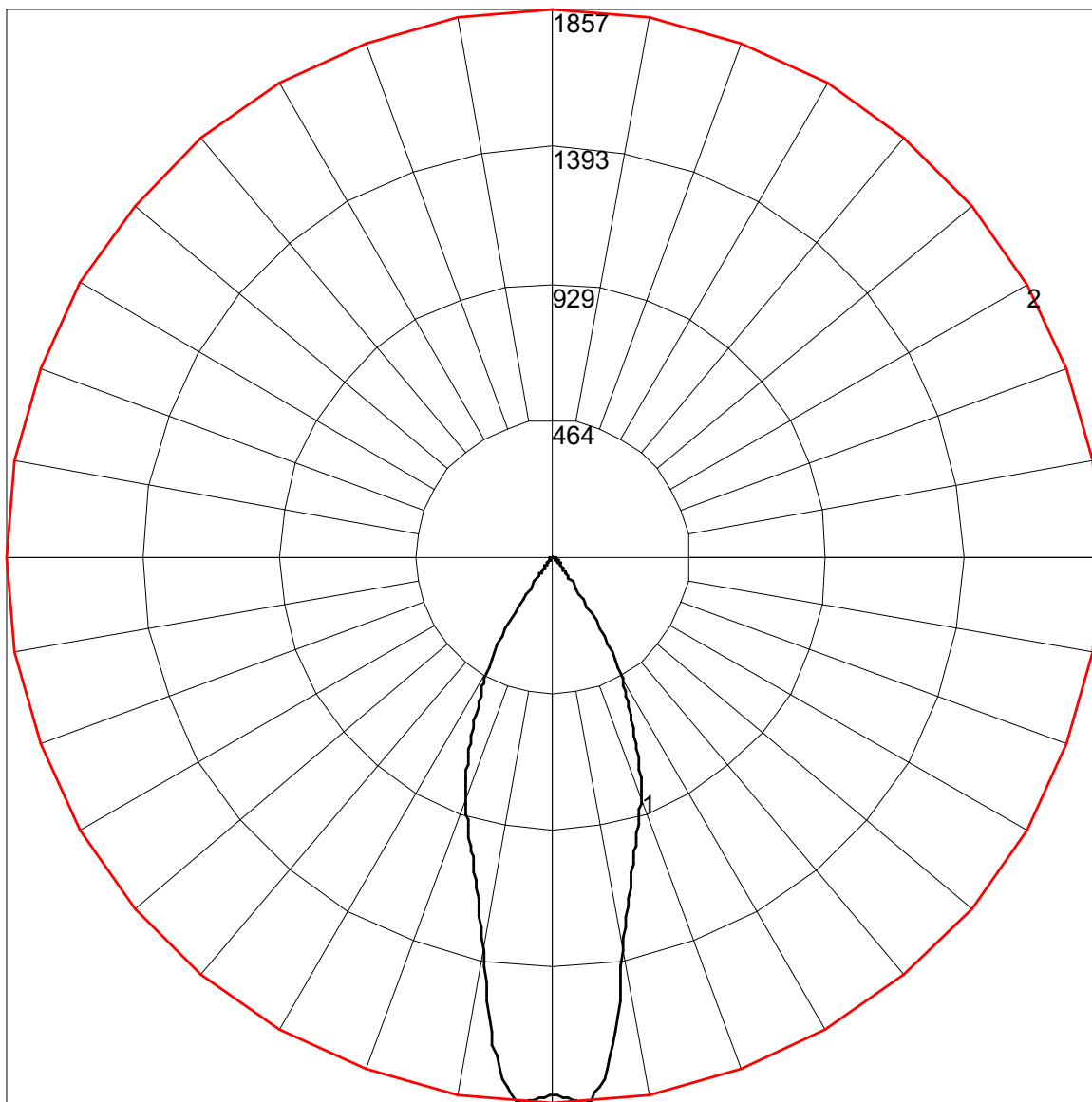
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	93	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	85	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	78	83	79	77	76
6	92	84	78	75	90	83	78	74	82	77	74	80	76	73	79	76	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 = 1857.451 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.)