



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-L80-830-XXX-DIM-UNV-OM-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.27

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 4-FEB-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 8CR-TL-L80-830-xxx-DIM-UNV-OM-CS-xx

[LUMINAIRE] 8" DIA. SURFACE CYLINDER

[MORE] lastic lens enclosure

[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	7733
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	79.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.56
Spacing Criterion (90-270)	0.56
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	14299	14299	14299
55	5338	5338	5338
65	2190	2190	2190
75	1100	1100	1100
85	817	817	817

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CANDELA TABULATION

	<u>0</u>
0.0	16082.250
0.5	16069.249
1.0	16069.249
1.5	16030.246
2.0	15965.241
2.5	15874.234
3.0	15783.227
3.5	15666.218
4.0	15523.206
4.5	15341.192
5.0	15107.174
5.5	14873.156
6.0	14613.136
6.5	14327.113
7.0	14015.089
7.5	13703.065
8.0	13352.038
8.5	13014.011
9.0	12672.085
9.5	12337.959
10.0	12006.433
10.5	11682.708
11.0	11364.183
11.5	11053.459
12.0	10750.536
12.5	10463.213
13.0	10184.992
13.5	9926.271
14.0	9675.352
14.5	9445.234
15.0	9224.217
15.5	9009.700
16.0	8797.784
16.5	8591.068
17.0	8388.252
17.5	8193.237
18.0	8002.122
18.5	7818.808
19.0	7635.493
19.5	7452.179
20.0	7268.865
20.5	7084.251
21.0	6900.936
21.5	6717.622
22.0	6535.608
22.5	6353.594
23.0	6172.880
23.5	5990.866
24.0	5810.152
24.5	5630.738
25.0	5457.824
25.5	5290.111
26.0	5130.199
26.5	4972.886

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CANDELA TABULATION - (Cont.)

27.0	4811.674
27.5	4646.561
28.0	4476.248
28.5	4305.935
29.0	4130.421
29.5	3947.107
30.0	3755.992
30.5	3555.776
31.0	3343.860
31.5	3125.443
32.0	2904.426
32.5	2682.108
33.0	2462.391
33.5	2242.674
34.0	2026.858
34.5	1822.742
35.0	1622.526
35.5	1432.711
36.0	1255.898
36.5	1094.685
37.0	951.674
37.5	825.564
38.0	716.356
38.5	622.748
39.0	540.842
39.5	471.937
40.0	417.332
40.5	378.329
41.0	353.627
41.5	331.526
42.0	310.724
42.5	287.322
43.0	262.620
43.5	239.219
44.0	217.117
44.5	198.915
45.0	184.614
45.5	172.913
46.0	162.513
46.5	153.412
47.0	145.611
47.5	137.811
48.0	130.010
48.5	123.510
49.0	117.009
49.5	110.509
50.0	104.008
50.5	98.808
51.0	92.307
51.5	87.107
52.0	83.206
52.5	78.006
53.0	72.806
53.5	67.605
54.0	63.705
54.5	59.805

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CANDELA TABULATION - (Cont.)

55.0	55.904
55.5	52.004
56.0	49.404
56.5	45.504
57.0	44.203
57.5	41.603
58.0	37.703
58.5	35.103
59.0	33.803
59.5	31.202
60.0	29.902
60.5	28.602
61.0	26.002
61.5	26.002
62.0	23.402
62.5	22.102
63.0	20.802
63.5	19.502
64.0	18.201
64.5	18.201
65.0	16.901
65.5	15.601
66.0	15.601
66.5	14.301
67.0	14.301
67.5	13.001
68.0	11.701
68.5	11.701
69.0	10.401
69.5	10.401
70.0	9.101
70.5	9.101
71.0	7.801
71.5	7.801
72.0	7.801
72.5	6.501
73.0	6.501
73.5	6.501
74.0	5.200
74.5	6.501
75.0	5.200
75.5	5.200
76.0	5.200
76.5	3.900
77.0	3.900
77.5	3.900
78.0	3.900
78.5	3.900
79.0	2.600
79.5	3.900
80.0	2.600
80.5	2.600
81.0	2.600
81.5	2.600
82.0	2.600
82.5	2.600

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CANDELA TABULATION - (Cont.)

83.0	2.600
83.5	2.600
84.0	2.600
84.5	2.600
85.0	1.300
85.5	1.300
86.0	2.600
86.5	1.300
87.0	1.300
87.5	1.300
88.0	1.300
88.5	1.300
89.0	1.300
89.5	1.300
90.0	1.300
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
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122.5	0.000
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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

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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Zone	Lumens	%Lamp	%Fixt
0-20	3921.15	N.A.	50.70
0-30	6414.22	N.A.	82.90
0-40	7492.24	N.A.	96.90
0-60	7707.51	N.A.	99.70
0-80	7730.92	N.A.	100.00
0-90	7733.08	N.A.	100.00
10-90	6395.25	N.A.	82.70
20-40	3571.09	N.A.	46.20
20-50	3733.36	N.A.	48.30
40-70	232.83	N.A.	3.00
60-80	23.40	N.A.	0.30
70-80	5.85	N.A.	0.10
80-90	2.16	N.A.	0.00
90-110	0.04	N.A.	0.00
90-120	0.04	N.A.	0.00
90-130	0.04	N.A.	0.00
90-150	0.04	N.A.	0.00
90-180	0.04	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	7733.11	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1337.82
10-20	2583.33
20-30	2493.07
30-40	1078.02
40-50	162.27
50-60	53.00
60-70	17.55
70-80	5.85
80-90	2.16
90-100	0.04
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	102	97	93	90	95	91	88	92	90	87	90	88	86	84
4	100	93	88	84	98	92	87	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	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71
7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	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	61
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59

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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

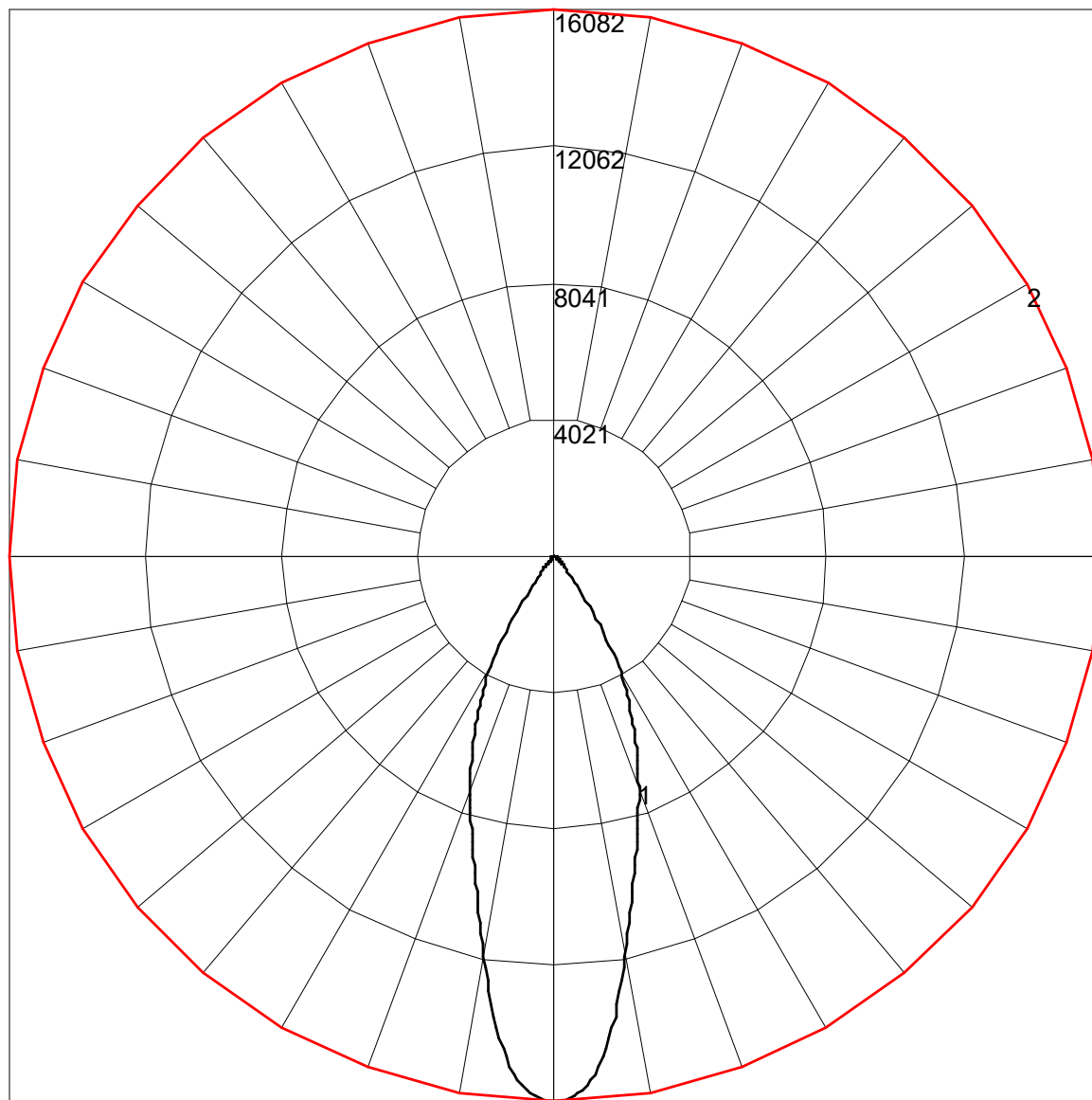
X=2H	Y=2H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	3H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	4H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	6H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	8H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	12H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2

UGR Viewed Endwise

4H	2H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	3H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	4H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	6H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	8H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	12H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
8H	4H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	6H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	8H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	12H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
12H	4H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	6H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
	8H	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2

Maximum UGR = 7.2

POLAR GRAPH



Maximum Candela = 16082.25 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)