



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-L70-835-XXX-DIM-UNV-ON-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.28

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 4-FEB-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 8CR-TL-L70-835-xxx-DIM-UNV-ON-CS-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	7055
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	67.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.26
Spacing Criterion (90-270)	0.26
Spacing Criterion (Diagonal)	0.28
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	3593	3593	3593
55	1329	1329	1329
65	601	601	601
75	245	245	245
85	0	0	0

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CANDELA TABULATION

	<u>0</u>
0.0	49140.304
0.5	48908.346
1.0	48282.059
1.5	47238.248
2.0	45800.109
2.5	44188.000
3.0	42436.718
3.5	40557.858
4.0	38516.627
4.5	36313.026
5.0	34028.240
5.5	31615.876
6.0	29273.101
6.5	26930.325
7.0	24645.538
7.5	22337.556
8.0	20145.553
8.5	18185.508
9.0	16492.214
9.5	15100.466
10.0	13894.285
10.5	12873.669
11.0	11945.837
11.5	11128.185
12.0	10399.837
12.5	9751.515
13.0	9182.058
13.5	8678.709
14.0	8228.710
14.5	7829.743
15.0	7472.527
15.5	7151.265
16.0	6863.637
16.5	6601.525
17.0	6361.448
17.5	6141.088
18.0	5932.326
18.5	5735.162
19.0	5547.276
19.5	5365.189
20.0	5187.741
20.5	5013.772
21.0	4838.644
21.5	4668.155
22.0	4496.506
22.5	4328.336
23.0	4167.126
23.5	4014.033
24.0	3867.900
24.5	3726.405
25.0	3593.030
25.5	3466.612
26.0	3348.314
26.5	3238.134

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CANDELA TABULATION - (Cont.)

27.0	3125.634
27.5	3011.975
28.0	2897.156
28.5	2780.017
29.0	2661.718
29.5	2541.100
30.0	2418.162
30.5	2290.585
31.0	2154.890
31.5	2011.076
32.0	1859.143
32.5	1704.891
33.0	1547.160
33.5	1382.470
34.0	1218.939
34.5	1063.527
35.0	916.234
35.5	774.740
36.0	642.524
36.5	523.065
37.0	419.844
37.5	331.700
38.0	260.953
38.5	201.803
39.0	153.092
39.5	114.819
40.0	86.984
40.5	73.067
41.0	67.268
41.5	64.948
42.0	61.469
42.5	59.149
43.0	55.670
43.5	53.350
44.0	51.031
44.5	48.711
45.0	46.392
45.5	44.072
46.0	41.752
46.5	39.433
47.0	37.113
47.5	34.794
48.0	33.634
48.5	31.314
49.0	30.155
49.5	27.835
50.0	26.675
50.5	24.356
51.0	23.196
51.5	22.036
52.0	20.876
52.5	18.557
53.0	17.397
53.5	16.237
54.0	15.077
54.5	15.077

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CANDELA TABULATION - (Cont.)

55.0	13.917
55.5	12.758
56.0	11.598
56.5	11.598
57.0	10.438
57.5	10.438
58.0	9.278
58.5	9.278
59.0	8.119
59.5	8.119
60.0	6.959
60.5	6.959
61.0	6.959
61.5	5.799
62.0	5.799
62.5	5.799
63.0	5.799
63.5	4.639
64.0	4.639
64.5	4.639
65.0	4.639
65.5	3.479
66.0	3.479
66.5	3.479
67.0	3.479
67.5	3.479
68.0	3.479
68.5	2.320
69.0	2.320
69.5	2.320
70.0	2.320
70.5	2.320
71.0	2.320
71.5	2.320
72.0	2.320
72.5	2.320
73.0	1.160
73.5	1.160
74.0	1.160
74.5	1.160
75.0	1.160
75.5	1.160
76.0	1.160
76.5	1.160
77.0	1.160
77.5	1.160
78.0	1.160
78.5	1.160
79.0	1.160
79.5	1.160
80.0	1.160
80.5	1.160
81.0	1.160
81.5	0.000
82.0	0.000
82.5	0.000

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CANDELA TABULATION - (Cont.)

83.0	0.000
83.5	0.000
84.0	0.000
84.5	0.000
85.0	0.000
85.5	0.000
86.0	0.000
86.5	0.000
87.0	0.000
87.5	0.000
88.0	0.000
88.5	0.000
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
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120.0	0.000
120.5	0.000
121.0	0.000
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122.0	0.000
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123.5	0.000
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125.5	0.000
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126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
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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
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156.5	0.000
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158.0	0.000
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159.0	0.000
159.5	0.000
160.0	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

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
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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	4714.14	N.A.	66.80
0-30	6378.15	N.A.	90.40
0-40	6999.14	N.A.	99.20
0-60	7048.74	N.A.	99.90
0-80	7054.64	N.A.	100.00
0-90	7054.8	N.A.	100.00
10-90	4525.14	N.A.	64.10
20-40	2285.00	N.A.	32.40
20-50	2321.53	N.A.	32.90
40-70	53.95	N.A.	0.80
60-80	5.90	N.A.	0.10
70-80	1.56	N.A.	0.00
80-90	0.16	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	7054.8	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2529.66
10-20	2184.48
20-30	1664.01
30-40	620.98
40-50	36.53
50-60	13.07
60-70	4.34
70-80	1.56
80-90	0.16
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	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92
3	107	102	98	95	105	101	97	94	98	95	93	96	94	92	94	92	90	89
4	103	98	93	90	102	97	93	90	95	91	89	93	90	88	91	89	87	86
5	100	94	89	86	99	93	89	86	91	88	85	90	87	84	88	86	84	82
6	97	90	86	82	95	89	85	82	88	84	82	87	84	81	86	83	81	80
7	94	87	82	79	93	86	82	79	85	81	79	84	81	78	83	80	78	77
8	91	84	79	76	90	83	79	76	82	79	76	82	78	76	81	78	75	74
9	88	81	77	74	87	81	77	74	80	76	74	79	76	73	78	75	73	72
10	86	79	74	72	85	78	74	71	78	74	71	77	74	71	76	73	71	70

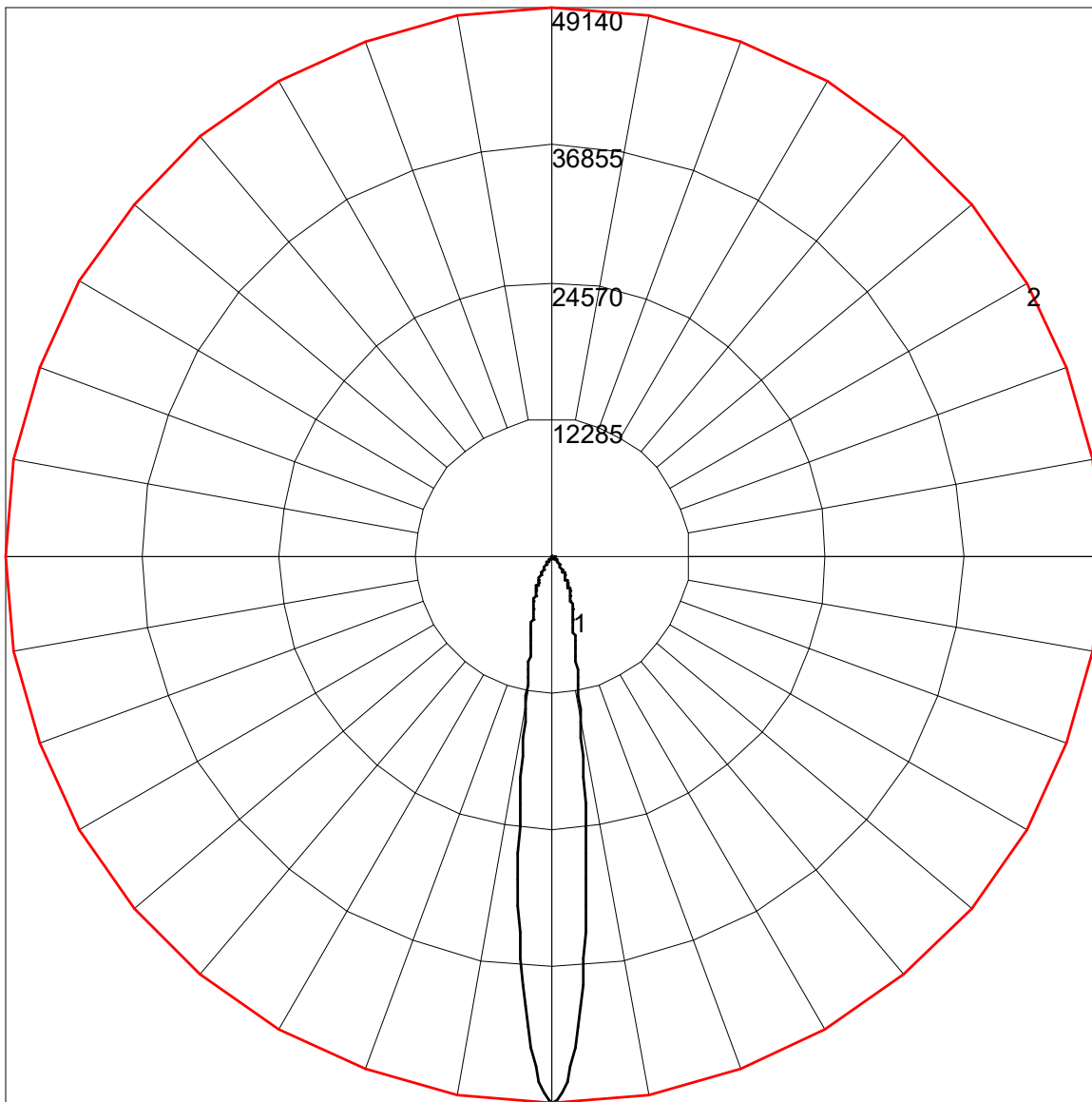
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UGR TABLE - CORRECTED

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					UGR Viewed Endwise				
X=2H	Y=2H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	3H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	4H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	6H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	8H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	12H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
4H	2H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	3H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	4H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	6H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	8H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	12H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
8H	4H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	6H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	8H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	12H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
12H	4H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	6H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	8H	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0

Maximum UGR = 7.0

POLAR GRAPH



Maximum Candela = 49140.304 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.)