



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-L15-835-XXX-DIM-UNV-ON-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.05

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 3-FEB-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 8CR-TL-L15-835-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	1528
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	13.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.18
Spacing Criterion (90-270)	0.18
Spacing Criterion (Diagonal)	0.20
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	759	759	759
55	288	288	288
65	98	98	98
75	0	0	0
85	0	0	0

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CANDELA TABULATION

	<u>0</u>
0.0	16592.301
0.5	16411.294
1.0	15823.022
1.5	14993.407
2.0	14050.662
2.5	13070.208
3.0	12021.876
3.5	10913.209
4.0	9736.664
4.5	8552.577
5.0	7413.742
5.5	6485.327
6.0	5740.936
6.5	5131.546
7.0	4614.922
7.5	4171.455
8.0	3783.799
8.5	3443.657
9.0	3144.995
9.5	2884.044
10.0	2659.293
10.5	2464.711
11.0	2293.509
11.5	2146.440
12.0	2018.227
12.5	1906.606
13.0	1810.069
13.5	1726.354
14.0	1653.197
14.5	1589.090
15.0	1532.525
15.5	1481.994
16.0	1435.988
16.5	1394.508
17.0	1356.798
17.5	1321.351
18.0	1290.429
18.5	1261.769
19.0	1233.110
19.5	1204.450
20.0	1175.037
20.5	1144.115
21.0	1111.684
21.5	1076.991
22.0	1037.773
22.5	994.784
23.0	947.270
23.5	899.001
24.0	852.995
24.5	810.006
25.0	770.034
25.5	731.570
26.0	696.877
26.5	665.200

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CANDELA TABULATION - (Cont.)

27.0	640.312
27.5	620.703
28.0	607.127
28.5	596.569
29.0	587.518
29.5	579.222
30.0	569.418
30.5	549.054
31.0	521.149
31.5	486.456
32.0	448.746
32.5	408.774
33.0	368.047
33.5	322.796
34.0	273.019
34.5	225.504
35.0	182.515
35.5	144.051
36.0	107.096
36.5	74.665
37.0	46.760
37.5	28.659
38.0	20.363
38.5	18.855
39.0	18.101
39.5	17.346
40.0	15.838
40.5	15.838
41.0	15.084
41.5	14.330
42.0	13.576
42.5	12.821
43.0	12.067
43.5	11.313
44.0	11.313
44.5	10.559
45.0	9.805
45.5	9.805
46.0	9.050
46.5	9.050
47.0	8.296
47.5	7.542
48.0	7.542
48.5	6.788
49.0	6.788
49.5	6.034
50.0	6.034
50.5	5.279
51.0	5.279
51.5	4.525
52.0	4.525
52.5	3.771
53.0	3.771
53.5	3.771
54.0	3.017
54.5	3.017

CANDELA TABULATION - (Cont.)

55.0	3.017
55.5	3.017
56.0	3.017
56.5	2.263
57.0	2.263
57.5	2.263
58.0	2.263
58.5	2.263
59.0	1.508
59.5	1.508
60.0	1.508
60.5	1.508
61.0	1.508
61.5	1.508
62.0	1.508
62.5	1.508
63.0	1.508
63.5	0.754
64.0	0.754
64.5	0.754
65.0	0.754
65.5	0.754
66.0	0.754
66.5	0.754
67.0	0.754
67.5	0.754
68.0	0.754
68.5	0.754
69.0	0.754
69.5	0.754
70.0	0.754
70.5	0.754
71.0	0.754
71.5	0.754
72.0	0.754
72.5	0.754
73.0	0.754
73.5	0.754
74.0	0.000
74.5	0.000
75.0	0.000
75.5	0.000
76.0	0.000
76.5	0.000
77.0	0.000
77.5	0.000
78.0	0.000
78.5	0.000
79.0	0.000
79.5	0.000
80.0	0.000
80.5	0.000
81.0	0.000
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
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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
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116.5	0.000
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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
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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

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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	1014.91	N.A.	66.40
0-30	1381.12	N.A.	90.40
0-40	1515.69	N.A.	99.20
0-60	1526.48	N.A.	99.90
0-80	1527.76	N.A.	100.00
0-90	1527.76	N.A.	100.00
10-90	960.90	N.A.	62.90
20-40	500.78	N.A.	32.80
20-50	508.74	N.A.	33.30
40-70	11.78	N.A.	0.80
60-80	1.28	N.A.	0.10
70-80	0.29	N.A.	0.00
80-90	0.00	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	1527.76	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	566.87
10-20	448.04
20-30	366.21
30-40	134.56
40-50	7.96
50-60	2.84
60-70	0.98
70-80	0.29
80-90	0.00
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	107	105	104	103	102	101	99	99	98	96
2	111	107	104	101	109	105	103	100	102	100	98	99	98	96	97	95	94	92
3	107	102	98	95	105	101	97	95	98	95	93	96	94	92	94	92	90	89
4	103	98	94	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	83
6	97	90	86	83	96	90	85	82	88	85	82	87	84	81	86	83	81	80
7	94	87	83	80	93	86	82	79	85	82	79	84	81	79	83	80	78	77
8	91	84	80	77	90	84	79	77	83	79	76	82	78	76	81	78	76	75
9	88	81	77	74	88	81	77	74	80	76	74	79	76	74	79	76	73	72
10	86	79	75	72	85	79	74	72	78	74	72	77	74	71	77	73	71	70

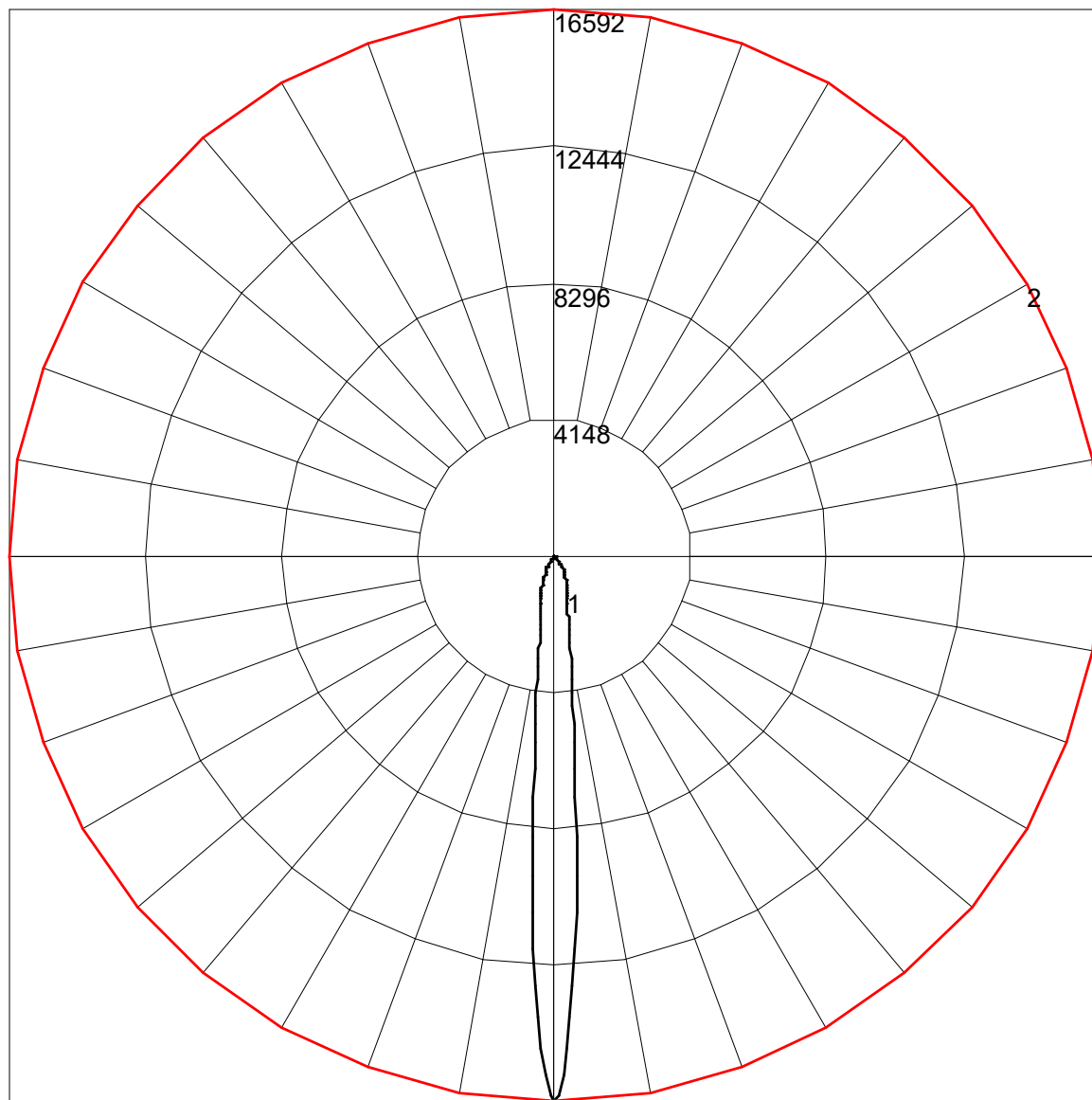
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UGR TABLE - CORRECTED

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	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	3H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	4H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	6H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	8H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	12H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
4H	2H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	3H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	4H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	6H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	8H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	12H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
8H	4H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	6H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	8H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	12H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
12H	4H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	6H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	8H	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7

Maximum UGR = 1.7

POLAR GRAPH



Maximum Candela = 16592.301 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.)