



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-L30-835-XXX-DIM-UNV-LM-WH-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.09

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 29-JAN-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 8CR-TL-L30-835-xxx-DIM-UNV-LM-WH-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	2783
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	103
Total Luminaire Watts	26.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.60
Spacing Criterion (90-270)	0.60
Spacing Criterion (Diagonal)	0.56
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.46 ft (Diameter)
Luminous Width (90-270)	0.46 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	12428	12428	12428
55	9100	9100	9100
65	7415	7415	7415
75	6035	6035	6035
85	3969	3969	3969

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CANDELA TABULATION

	<u>0</u>
0.0	6569.580
0.5	6566.551
1.0	6557.465
1.5	6543.835
2.0	6525.662
2.5	6499.916
3.0	6471.142
3.5	6437.825
4.0	6398.450
4.5	6357.560
5.0	6312.128
5.5	6260.637
6.0	6204.603
6.5	6142.512
7.0	6075.877
7.5	6003.185
8.0	5922.920
8.5	5836.598
9.0	5745.732
9.5	5648.809
10.0	5544.314
10.5	5433.760
11.0	5315.635
11.5	5188.423
12.0	5056.668
12.5	4917.341
13.0	4771.956
13.5	4618.999
14.0	4461.499
14.5	4297.941
15.0	4131.354
15.5	3961.738
16.0	3792.123
16.5	3620.993
17.0	3454.406
17.5	3287.819
18.0	3119.718
18.5	2954.645
19.0	2791.087
19.5	2633.587
20.0	2480.630
20.5	2333.730
21.0	2195.918
21.5	2064.163
22.0	1932.408
22.5	1808.225
23.0	1690.099
23.5	1578.032
24.0	1473.688
24.5	1374.947
25.0	1282.719
25.5	1195.791
26.0	1115.223
26.5	1039.805

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CANDELA TABULATION - (Cont.)

27.0	969.687
27.5	904.718
28.0	844.141
28.5	788.107
29.0	736.162
29.5	687.701
30.0	642.874
30.5	601.076
31.0	562.306
31.5	526.263
32.0	492.643
32.5	461.446
33.0	432.369
33.5	405.260
34.0	380.272
34.5	357.102
35.0	335.445
35.5	315.606
36.0	297.130
36.5	280.320
37.0	264.722
37.5	250.486
38.0	237.613
38.5	225.649
39.0	214.746
39.5	204.750
40.0	195.664
40.5	187.183
41.0	179.459
41.5	172.342
42.0	165.678
42.5	159.620
43.0	153.866
43.5	148.565
44.0	143.719
44.5	139.024
45.0	134.632
45.5	130.544
46.0	126.757
46.5	123.123
47.0	119.640
47.5	116.308
48.0	113.279
48.5	110.250
49.0	107.373
49.5	104.647
50.0	102.072
50.5	99.498
51.0	97.075
51.5	94.652
52.0	92.380
52.5	90.260
53.0	87.988
53.5	85.868
54.0	83.899
54.5	81.930

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CANDELA TABULATION - (Cont.)

55.0	79.962
55.5	77.993
56.0	76.176
56.5	74.358
57.0	72.541
57.5	70.724
58.0	69.058
58.5	67.392
59.0	65.726
59.5	64.212
60.0	62.697
60.5	61.031
61.0	59.517
61.5	58.003
62.0	56.488
62.5	55.125
63.0	53.611
63.5	52.248
64.0	50.885
64.5	49.522
65.0	48.007
65.5	46.644
66.0	45.281
66.5	44.070
67.0	42.707
67.5	41.344
68.0	40.132
68.5	38.921
69.0	37.558
69.5	36.346
70.0	35.135
70.5	33.923
71.0	32.863
71.5	31.652
72.0	30.440
72.5	29.380
73.0	28.168
73.5	27.108
74.0	26.048
74.5	24.988
75.0	23.928
75.5	22.868
76.0	21.808
76.5	20.748
77.0	19.688
77.5	18.779
78.0	17.719
78.5	16.810
79.0	15.901
79.5	14.841
80.0	13.933
80.5	13.024
81.0	12.115
81.5	11.207
82.0	10.298
82.5	9.389

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CANDELA TABULATION - (Cont.)

83.0	8.632
83.5	7.724
84.0	6.966
84.5	6.058
85.0	5.300
85.5	4.543
86.0	3.786
86.5	3.180
87.0	2.575
87.5	2.120
88.0	1.666
88.5	1.363
89.0	1.060
89.5	0.757
90.0	0.454
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
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128.0	0.000
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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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Zone	Lumens	%Lamp	%Fixt
0-20	1689.6	N.A.	60.70
0-30	2301.53	N.A.	82.70
0-40	2524.04	N.A.	90.70
0-60	2702.91	N.A.	97.10
0-80	2776.11	N.A.	99.80
0-90	2782.57	N.A.	100.00
10-90	2204.04	N.A.	79.20
20-40	834.43	N.A.	30.00
20-50	941.26	N.A.	33.80
40-70	226.65	N.A.	8.10
60-80	73.20	N.A.	2.60
70-80	25.42	N.A.	0.90
80-90	6.47	N.A.	0.20
90-110	0.01	N.A.	0.00
90-120	0.01	N.A.	0.00
90-130	0.01	N.A.	0.00
90-150	0.01	N.A.	0.00
90-180	0.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	2782.59	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	578.53
10-20	1111.07
20-30	611.92
30-40	222.51
40-50	106.82
50-60	72.05
60-70	47.78
70-80	25.42
80-90	6.47
90-100	0.01
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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	89
3	104	98	94	90	102	97	93	89	94	91	88	92	89	86	90	87	85	84
4	100	93	88	84	98	92	87	83	90	86	83	88	84	82	86	83	81	79
5	96	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75
6	92	84	79	75	90	83	78	75	82	77	74	80	76	74	79	76	73	72
7	88	80	75	71	87	79	74	71	78	74	71	77	73	70	76	73	70	69
8	85	77	71	68	84	76	71	68	75	71	67	74	70	67	73	70	67	66
9	82	73	68	65	81	73	68	65	72	68	65	71	67	64	71	67	64	63
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61

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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	13.1	14.1	13.4	14.4	14.7	UGR Viewed Endwise	13.1	14.1	13.4	14.4	14.7
	3H	14.5	15.4	14.9	15.7	16.1		14.5	15.4	14.9	15.7	16.1
	4H	15.0	15.8	15.4	16.2	16.6		15.0	15.8	15.4	16.2	16.6
	6H	15.3	16.1	15.8	16.5	16.9		15.3	16.1	15.8	16.5	16.9
	8H	15.4	16.1	15.9	16.5	16.9		15.4	16.1	15.9	16.5	16.9
	12H	15.5	16.1	15.9	16.5	17.0		15.5	16.1	15.9	16.5	17.0

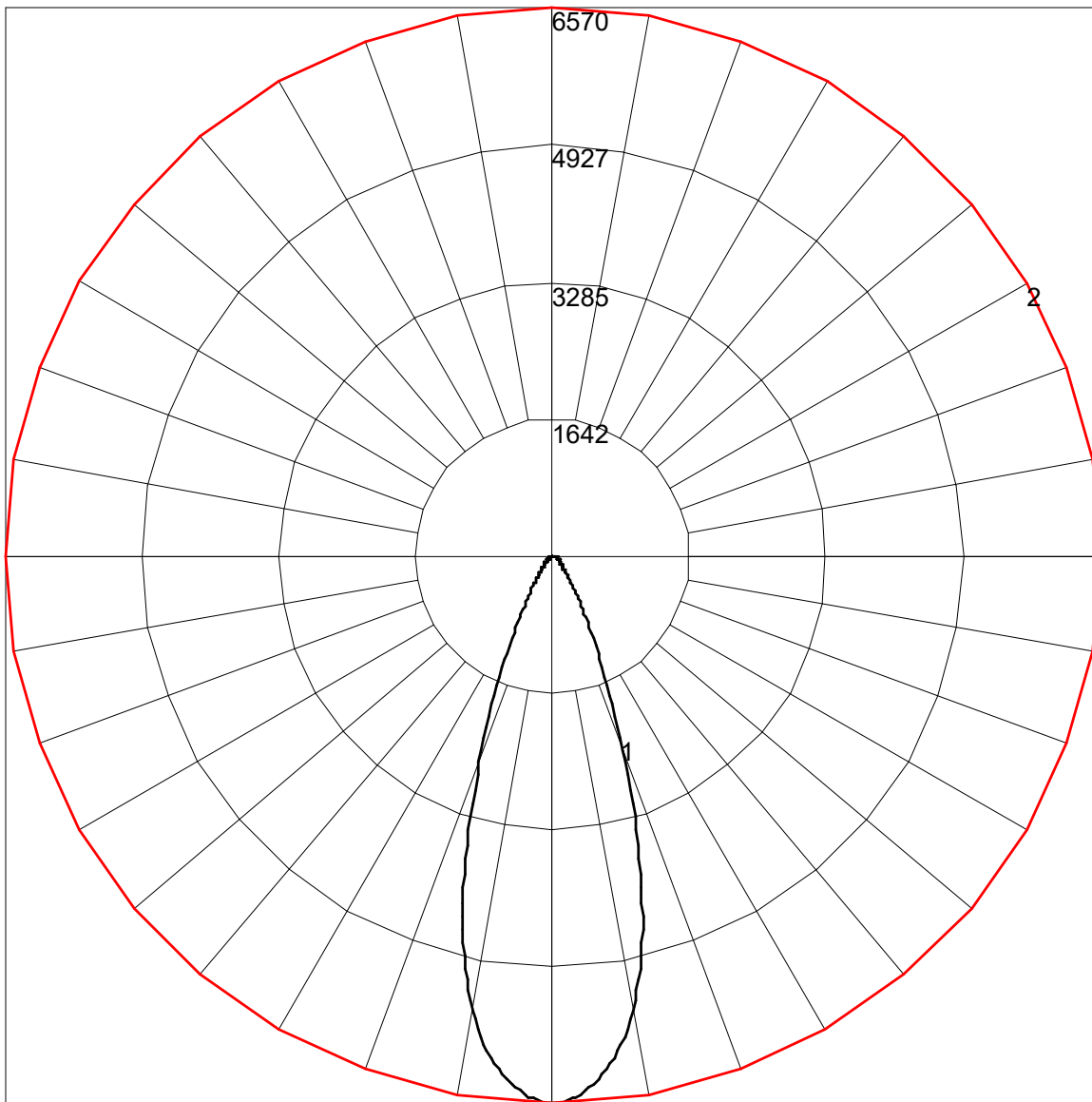
4H	2H	13.5	14.3	13.9	14.7	15.1	13.5	14.3	13.9	14.7	15.1
	3H	15.1	15.8	15.5	16.2	16.6	15.1	15.8	15.5	16.2	16.6
	4H	15.7	16.3	16.1	16.7	17.2	15.7	16.3	16.1	16.7	17.2
	6H	16.2	16.7	16.6	17.1	17.6	16.2	16.7	16.6	17.1	17.6
	8H	16.3	16.8	16.8	17.2	17.7	16.3	16.8	16.8	17.2	17.7
	12H	16.4	16.8	16.8	17.3	17.7	16.4	16.8	16.8	17.3	17.7

8H	4H	15.9	16.4	16.4	16.8	17.3	15.9	16.4	16.4	16.8	17.3
	6H	16.4	16.8	17.0	17.3	17.8	16.4	16.8	17.0	17.3	17.8
	8H	16.6	17.0	17.2	17.5	18.0	16.6	17.0	17.2	17.5	18.0
	12H	16.8	17.1	17.3	17.6	18.1	16.8	17.1	17.3	17.6	18.1

12H	4H	15.9	16.3	16.4	16.8	17.2	15.9	16.3	16.4	16.8	17.2
	6H	16.5	16.8	17.0	17.3	17.8	16.5	16.8	17.0	17.3	17.8
	8H	16.7	17.0	17.2	17.5	18.1	16.7	17.0	17.2	17.5	18.1

Maximum UGR = 18.1

POLAR GRAPH



Maximum Candela = 6569.58 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.)