



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-L60-835-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-L60-835-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	6083
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	53.9993
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	3098	3098	3098
55	1146	1146	1146
65	518	518	518
75	212	212	212
85	0	0	0

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CANDELA TABULATION

	<u>0</u>
0.0	42370
0.5	42170
1.0	41630
1.5	40730
2.0	39490
2.5	38100
3.0	36590
3.5	34970
4.0	33210
4.5	31310
5.0	29340
5.5	27260
6.0	25240
6.5	23220
7.0	21250
7.5	19260
8.0	17370
8.5	15680
9.0	14220
9.5	13020
10.0	11980
10.5	11100
11.0	10300
11.5	9595
12.0	8967
12.5	8408
13.0	7917
13.5	7483
14.0	7095
14.5	6751
15.0	6443
15.5	6166
16.0	5918
16.5	5692
17.0	5485
17.5	5295
18.0	5115
18.5	4945
19.0	4783
19.5	4626
20.0	4473
20.5	4323
21.0	4172
21.5	4025
22.0	3877
22.5	3732
23.0	3593
23.5	3461
24.0	3335
24.5	3213
25.0	3098
25.5	2989
26.0	2887
26.5	2792

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CANDELA TABULATION - (Cont.)

27.0	2695
27.5	2597
28.0	2498
28.5	2397
29.0	2295
29.5	2191
30.0	2085
30.5	1975
31.0	1858
31.5	1734
32.0	1603
32.5	1470
33.0	1334
33.5	1192
34.0	1051
34.5	917
35.0	790
35.5	668
36.0	554
36.5	451
37.0	362
37.5	286
38.0	225
38.5	174
39.0	132
39.5	99
40.0	75
40.5	63
41.0	58
41.5	56
42.0	53
42.5	51
43.0	48
43.5	46
44.0	44
44.5	42
45.0	40
45.5	38
46.0	36
46.5	34
47.0	32
47.5	30
48.0	29
48.5	27
49.0	26
49.5	24
50.0	23
50.5	21
51.0	20
51.5	19
52.0	18
52.5	16
53.0	15
53.5	14
54.0	13
54.5	13

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CANDELA TABULATION - (Cont.)

55.0	12
55.5	11
56.0	10
56.5	10
57.0	9
57.5	9
58.0	8
58.5	8
59.0	7
59.5	7
60.0	6
60.5	6
61.0	6
61.5	5
62.0	5
62.5	5
63.0	5
63.5	4
64.0	4
64.5	4
65.0	4
65.5	3
66.0	3
66.5	3
67.0	3
67.5	3
68.0	3
68.5	2
69.0	2
69.5	2
70.0	2
70.5	2
71.0	2
71.5	2
72.0	2
72.5	2
73.0	1
73.5	1
74.0	1
74.5	1
75.0	1
75.5	1
76.0	1
76.5	1
77.0	1
77.5	1
78.0	1
78.5	1
79.0	1
79.5	1
80.0	1
80.5	1
81.0	1
81.5	0
82.0	0
82.5	0

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CANDELA TABULATION - (Cont.)

83.0	0
83.5	0
84.0	0
84.5	0
85.0	0
85.5	0
86.0	0
86.5	0
87.0	0
87.5	0
88.0	0
88.5	0
89.0	0
89.5	0
90.0	0
90.5	0
91.0	0
91.5	0
92.0	0
92.5	0
93.0	0
93.5	0
94.0	0
94.5	0
95.0	0
95.5	0
96.0	0
96.5	0
97.0	0
97.5	0
98.0	0
98.5	0
99.0	0
99.5	0
100.0	0
100.5	0
101.0	0
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102.0	0
102.5	0
103.0	0
103.5	0
104.0	0
104.5	0
105.0	0
105.5	0
106.0	0
106.5	0
107.0	0
107.5	0
108.0	0
108.5	0
109.0	0
109.5	0
110.0	0
110.5	0

CANDELA TABULATION - (Cont.)

111.0	0
111.5	0
112.0	0
112.5	0
113.0	0
113.5	0
114.0	0
114.5	0
115.0	0
115.5	0
116.0	0
116.5	0
117.0	0
117.5	0
118.0	0
118.5	0
119.0	0
119.5	0
120.0	0
120.5	0
121.0	0
121.5	0
122.0	0
122.5	0
123.0	0
123.5	0
124.0	0
124.5	0
125.0	0
125.5	0
126.0	0
126.5	0
127.0	0
127.5	0
128.0	0
128.5	0
129.0	0
129.5	0
130.0	0
130.5	0
131.0	0
131.5	0
132.0	0
132.5	0
133.0	0
133.5	0
134.0	0
134.5	0
135.0	0
135.5	0
136.0	0
136.5	0
137.0	0
137.5	0
138.0	0
138.5	0

CANDELA TABULATION - (Cont.)

139.0	0
139.5	0
140.0	0
140.5	0
141.0	0
141.5	0
142.0	0
142.5	0
143.0	0
143.5	0
144.0	0
144.5	0
145.0	0
145.5	0
146.0	0
146.5	0
147.0	0
147.5	0
148.0	0
148.5	0
149.0	0
149.5	0
150.0	0
150.5	0
151.0	0
151.5	0
152.0	0
152.5	0
153.0	0
153.5	0
154.0	0
154.5	0
155.0	0
155.5	0
156.0	0
156.5	0
157.0	0
157.5	0
158.0	0
158.5	0
159.0	0
159.5	0
160.0	0
160.5	0
161.0	0
161.5	0
162.0	0
162.5	0
163.0	0
163.5	0
164.0	0
164.5	0
165.0	0
165.5	0
166.0	0
166.5	0

CANDELA TABULATION - (Cont.)

167.0	0
167.5	0
168.0	0
168.5	0
169.0	0
169.5	0
170.0	0
170.5	0
171.0	0
171.5	0
172.0	0
172.5	0
173.0	0
173.5	0
174.0	0
174.5	0
175.0	0
175.5	0
176.0	0
176.5	0
177.0	0
177.5	0
178.0	0
178.5	0
179.0	0
179.5	0
180.0	0

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4064.65	N.A.	66.80
0-30	5499.4	N.A.	90.40
0-40	6034.83	N.A.	99.20
0-60	6077.6	N.A.	99.90
0-80	6082.69	N.A.	100.00
0-90	6082.82	N.A.	100.00
10-90	3901.69	N.A.	64.10
20-40	1970.18	N.A.	32.40
20-50	2001.68	N.A.	32.90
40-70	46.51	N.A.	0.80
60-80	5.09	N.A.	0.10
70-80	1.34	N.A.	0.00
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	6082.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2181.13
10-20	1883.52
20-30	1434.76
30-40	535.43
40-50	31.50
50-60	11.27
60-70	3.74
70-80	1.34
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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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

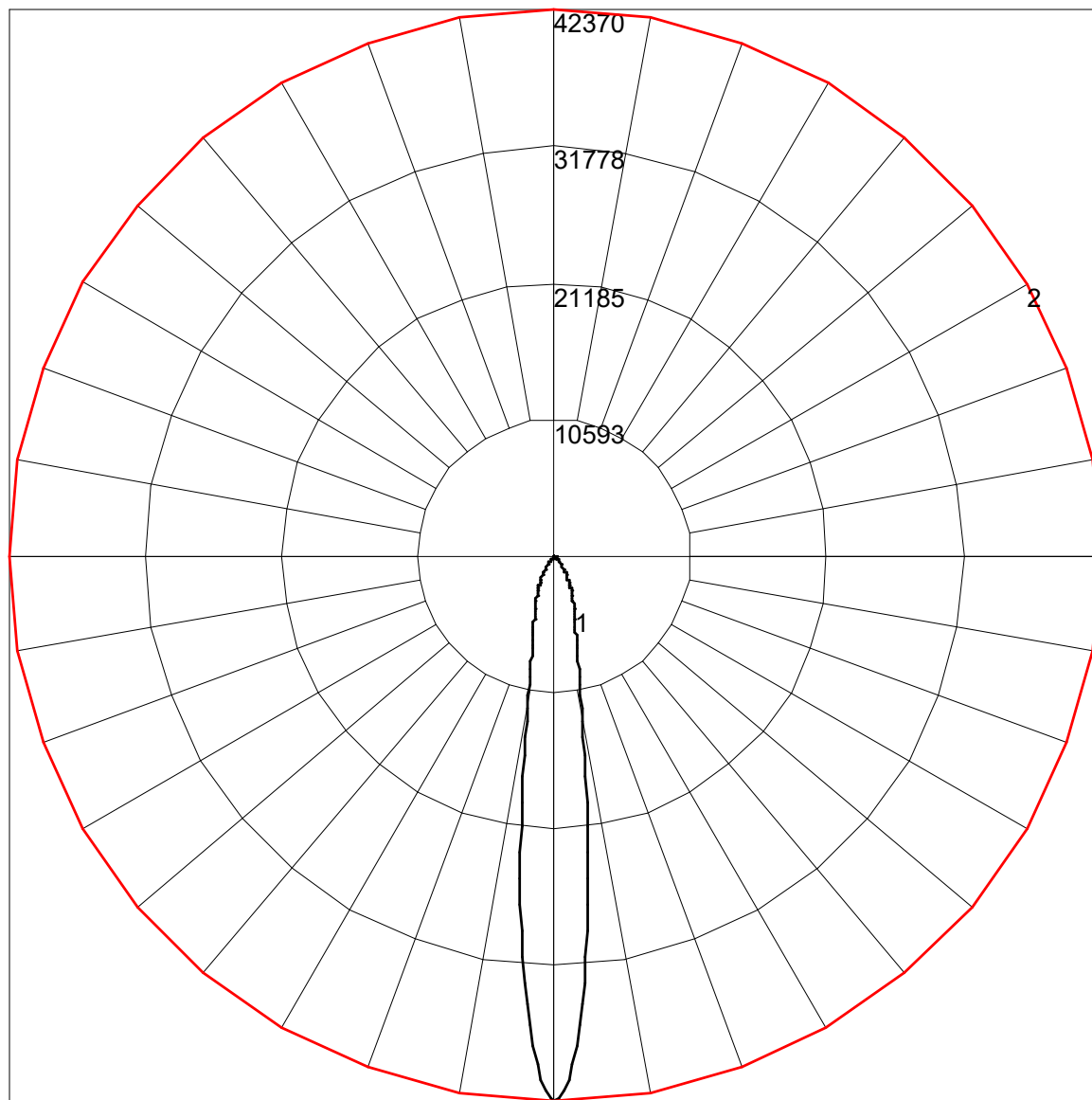
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	6.4	6.4	6.4	6.4	6.4	UGR Viewed Endwise	6.4	6.4	6.4	6.4	6.4
	3H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	4H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	6H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	8H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	12H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
4H	2H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	3H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	4H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	6H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	8H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	12H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
8H	4H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	6H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	8H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	12H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
12H	4H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	6H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	8H	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4

Maximum UGR = 6.4

POLAR GRAPH



Maximum Candela = 42370 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.)