



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-L40-835-XXX-DIM-UNV-ON-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL#12316380.23

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 25-JAN-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6CR-TL-L40-835-xxx-DIM-UNV-ON-CS-xx

[LUMINAIRE] 6" DIA SURFACE CYLINDER

[LAMP] One white LED

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Corridor, Hotel, Industrial, Office, Downlight

[_SEARCH_MOUNTING] Surface

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3644
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	37.6148
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.22
Spacing Criterion (90-270)	0.22
Spacing Criterion (Diagonal)	0.26
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.38 ft (Diameter)
Luminous Width (90-270)	0.38 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	2616	2616	2616
55	679	679	679
65	230	230	230
75	376	376	376
85	0	0	0

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CANDELA TABULATION

	<u>0</u>
0.0	28290
0.5	28180
1.0	27940
1.5	27460
2.0	26790
2.5	25860
3.0	24630
3.5	23170
4.0	21530
4.5	19820
5.0	18070
5.5	16440
6.0	14910
6.5	13470
7.0	12130
7.5	10960
8.0	9983
8.5	9186
9.0	8520
9.5	7937
10.0	7413
10.5	6948
11.0	6531
11.5	6167
12.0	5848
12.5	5554
13.0	5281
13.5	5024
14.0	4794
14.5	4585
15.0	4392
15.5	4210
16.0	4034
16.5	3865
17.0	3703
17.5	3552
18.0	3405
18.5	3263
19.0	3127
19.5	2994
20.0	2861
20.5	2728
21.0	2602
21.5	2482
22.0	2363
22.5	2248
23.0	2137
23.5	2035
24.0	1945
24.5	1864
25.0	1792
25.5	1730
26.0	1676
26.5	1627

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CANDELA TABULATION - (Cont.)

27.0	1580
27.5	1530
28.0	1469
28.5	1396
29.0	1311
29.5	1214
30.0	1108
30.5	1001
31.0	893
31.5	780
32.0	665
32.5	551
33.0	446
33.5	353
34.0	271
34.5	201
35.0	143
35.5	99
36.0	72
36.5	57
37.0	47
37.5	42
38.0	40
38.5	38
39.0	36
39.5	34
40.0	33
40.5	31
41.0	30
41.5	28
42.0	27
42.5	25
43.0	24
43.5	23
44.0	22
44.5	20
45.0	19
45.5	18
46.0	17
46.5	16
47.0	15
47.5	14
48.0	13
48.5	12
49.0	11
49.5	10
50.0	9
50.5	8
51.0	8
51.5	7
52.0	7
52.5	6
53.0	6
53.5	5
54.0	5
54.5	5

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CANDELA TABULATION - (Cont.)

55.0	4
55.5	4
56.0	4
56.5	4
57.0	3
57.5	3
58.0	3
58.5	3
59.0	3
59.5	3
60.0	2
60.5	2
61.0	2
61.5	2
62.0	2
62.5	2
63.0	2
63.5	2
64.0	2
64.5	1
65.0	1
65.5	1
66.0	1
66.5	1
67.0	1
67.5	1
68.0	1
68.5	1
69.0	1
69.5	1
70.0	1
70.5	1
71.0	1
71.5	1
72.0	1
72.5	1
73.0	1
73.5	1
74.0	1
74.5	1
75.0	1
75.5	0
76.0	0
76.5	0
77.0	0
77.5	0
78.0	0
78.5	0
79.0	0
79.5	0
80.0	0
80.5	0
81.0	0
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
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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
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155.5	0
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157.0	0
157.5	0
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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	2587.81	N.A.	71.00
0-30	3437.64	N.A.	94.30
0-40	3622.9	N.A.	99.40
0-60	3642.25	N.A.	99.90
0-80	3644.2	N.A.	100.00
0-90	3644.2	N.A.	100.00
10-90	2300.97	N.A.	63.10
20-40	1035.1	N.A.	28.40
20-50	1050.17	N.A.	28.80
40-70	20.75	N.A.	0.60
60-80	1.95	N.A.	0.10
70-80	0.55	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	3644.2	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1343.23
10-20	1244.57
20-30	849.83
30-40	185.27
40-50	15.07
50-60	4.27
60-70	1.40
70-80	0.55
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	113	111	109	107	107	105	104	103	102	101	100	99	98	96
2	111	107	104	102	109	106	103	101	103	100	99	100	98	96	97	96	94	93
3	107	103	99	96	106	101	98	95	99	96	94	97	94	92	95	93	91	90
4	104	99	94	91	102	97	94	91	95	92	90	94	91	89	92	90	88	87
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84
6	98	91	87	84	96	91	87	84	89	86	83	88	85	83	87	84	82	81
7	95	88	84	81	94	88	84	81	87	83	80	86	82	80	85	82	80	79
8	92	85	81	78	91	85	81	78	84	80	78	83	80	78	82	79	77	76
9	90	83	79	76	89	82	78	76	82	78	75	81	78	75	80	77	75	74
10	87	80	76	74	86	80	76	73	79	76	73	79	75	73	78	75	73	72

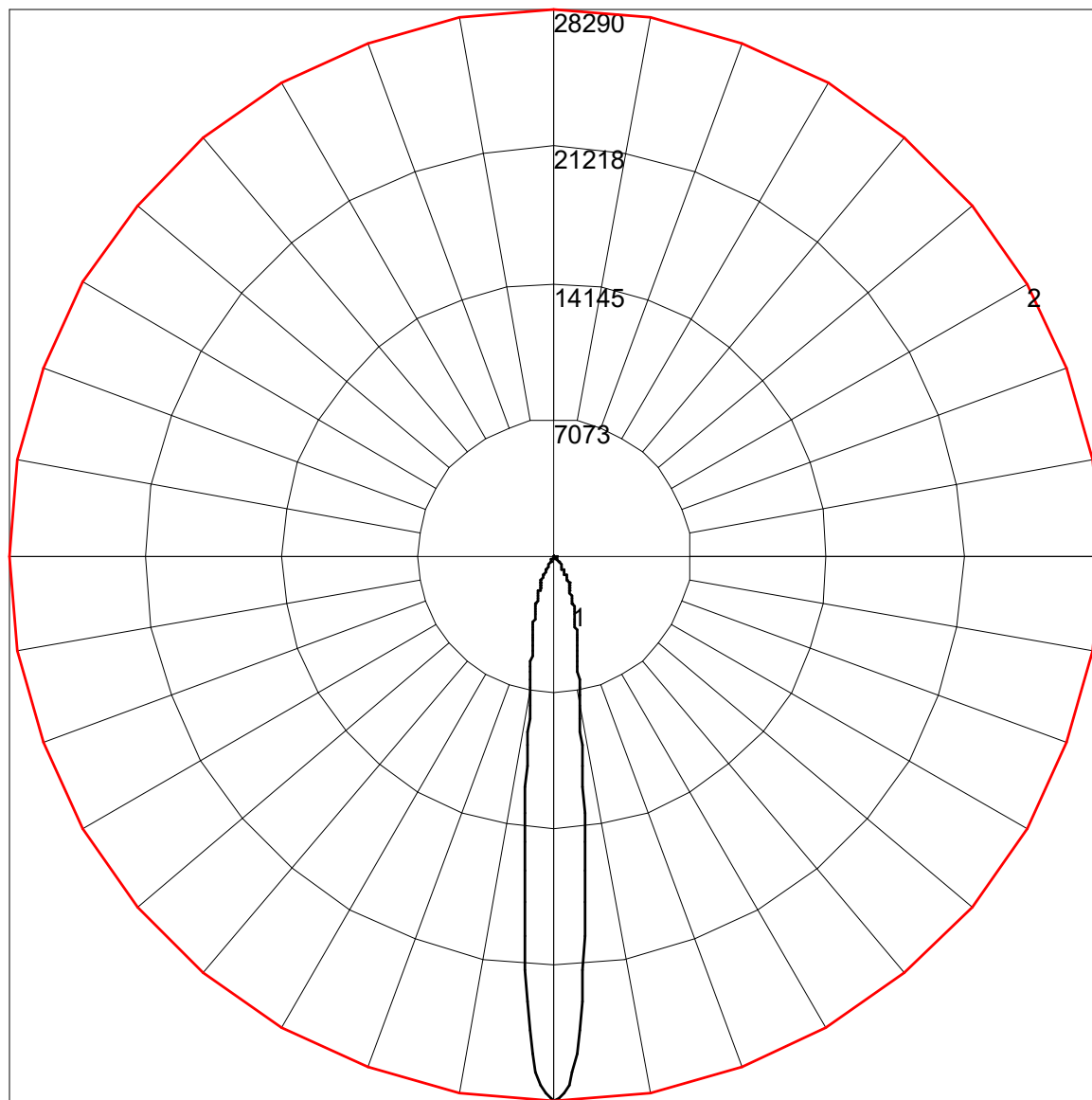
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UGR TABLE - CORRECTED

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	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	3H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	4H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	6H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	8H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	12H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
4H	2H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	3H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	4H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	6H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	8H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	12H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
8H	4H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	6H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	8H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	12H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
12H	4H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	6H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	8H	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7

Maximum UGR = 4.7

POLAR GRAPH



Maximum Candela = 28290 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.)