



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-L50-835-XXX-DIM-UNV-ON-CS-XX\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] Gen from UL #12316380.28

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 1/25/2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6CR-TL-L50-835-xxx-DIM-UNV-ON-CS-xx

[LUMINAIRE] SURFACE MOUNTED 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	4818
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	45.0884
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.28
Spacing Criterion (90-270)	0.28
Spacing Criterion (Diagonal)	0.32
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	3718	3718	3718
55	1358	1358	1358
65	922	922	922
75	1129	1129	1129
85	3351	3351	3351

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CANDELA TABULATION

	<u>0</u>
0.0	26890
0.5	26800
1.0	26880
1.5	26840
2.0	26780
2.5	26760
3.0	26560
3.5	26310
4.0	25730
4.5	24910
5.0	23630
5.5	22020
6.0	20270
6.5	18450
7.0	16690
7.5	15050
8.0	13710
8.5	12620
9.0	11700
9.5	10880
10.0	10160
10.5	9516
11.0	8921
11.5	8376
12.0	7873
12.5	7417
13.0	7004
13.5	6641
14.0	6316
14.5	6015
15.0	5746
15.5	5501
16.0	5277
16.5	5065
17.0	4867
17.5	4680
18.0	4500
18.5	4330
19.0	4168
19.5	4011
20.0	3862
20.5	3718
21.0	3575
21.5	3437
22.0	3300
22.5	3166
23.0	3034
23.5	2900
24.0	2765
24.5	2630
25.0	2499
25.5	2379
26.0	2270
26.5	2164

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CANDELA TABULATION - (Cont.)

27.0	2064
27.5	1971
28.0	1876
28.5	1771
29.0	1659
29.5	1543
30.0	1422
30.5	1301
31.0	1178
31.5	1056
32.0	935
32.5	816
33.0	699
33.5	587
34.0	478
34.5	378
35.0	286
35.5	209
36.0	151
36.5	107
37.0	76
37.5	60
38.0	55
38.5	52
39.0	50
39.5	47
40.0	45
40.5	43
41.0	41
41.5	39
42.0	37
42.5	36
43.0	34
43.5	32
44.0	30
44.5	29
45.0	27
45.5	26
46.0	24
46.5	23
47.0	21
47.5	20
48.0	19
48.5	18
49.0	16
49.5	15
50.0	14
50.5	13
51.0	13
51.5	12
52.0	11
52.5	10
53.0	10
53.5	9
54.0	9
54.5	8

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CANDELA TABULATION - (Cont.)

55.0	8
55.5	8
56.0	7
56.5	7
57.0	7
57.5	6
58.0	6
58.5	6
59.0	6
59.5	6
60.0	5
60.5	5
61.0	5
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	4
66.0	4
66.5	4
67.0	4
67.5	4
68.0	4
68.5	4
69.0	3
69.5	3
70.0	3
70.5	3
71.0	3
71.5	3
72.0	3
72.5	3
73.0	3
73.5	3
74.0	3
74.5	3
75.0	3
75.5	3
76.0	3
76.5	3
77.0	3
77.5	3
78.0	3
78.5	3
79.0	3
79.5	3
80.0	3
80.5	3
81.0	3
81.5	3
82.0	3
82.5	2

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CANDELA TABULATION - (Cont.)

83.0	3
83.5	3
84.0	3
84.5	3
85.0	3
85.5	2
86.0	2
86.5	2
87.0	2
87.5	2
88.0	3
88.5	2
89.0	3
89.5	3
90.0	2
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
101.5	0
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



**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 6CR-TL-L50-835-XXX-DIM-UNV-ON-CS-XX\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	3353.04	N.A.	69.60
0-30	4507.06	N.A.	93.50
0-40	4778.96	N.A.	99.20
0-60	4807.9	N.A.	99.80
0-80	4815.23	N.A.	99.90
0-90	4818.09	N.A.	100.00
10-90	3121.25	N.A.	64.80
20-40	1425.92	N.A.	29.60
20-50	1447.24	N.A.	30.00
40-70	33.09	N.A.	0.70
60-80	7.33	N.A.	0.20
70-80	3.17	N.A.	0.10
80-90	2.86	N.A.	0.10
90-110	0.05	N.A.	0.00
90-120	0.05	N.A.	0.00
90-130	0.05	N.A.	0.00
90-150	0.05	N.A.	0.00
90-180	0.05	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4818.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	1696.85
10-20	1656.2
20-30	1154.02
30-40	271.91
40-50	21.32
50-60	7.62
60-70	4.16
70-80	3.17
80-90	2.86
90-100	0.05
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	111	109	107	107	105	104	103	102	101	100	99	98	96
2	111	107	104	101	109	105	103	100	102	100	98	99	98	96	97	95	94	93
3	107	102	99	96	105	101	98	95	99	96	93	96	94	92	94	92	91	89
4	104	98	94	91	102	97	93	90	95	92	89	93	90	88	91	89	87	86
5	100	94	90	87	99	93	89	86	92	88	86	90	87	85	89	86	84	83
6	97	91	86	83	96	90	86	83	89	85	82	87	84	82	86	84	81	80
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79	78
8	91	85	80	77	91	84	80	77	83	80	77	82	79	77	81	79	76	75
9	89	82	78	75	88	82	77	75	81	77	74	80	77	74	79	76	74	73
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71

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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

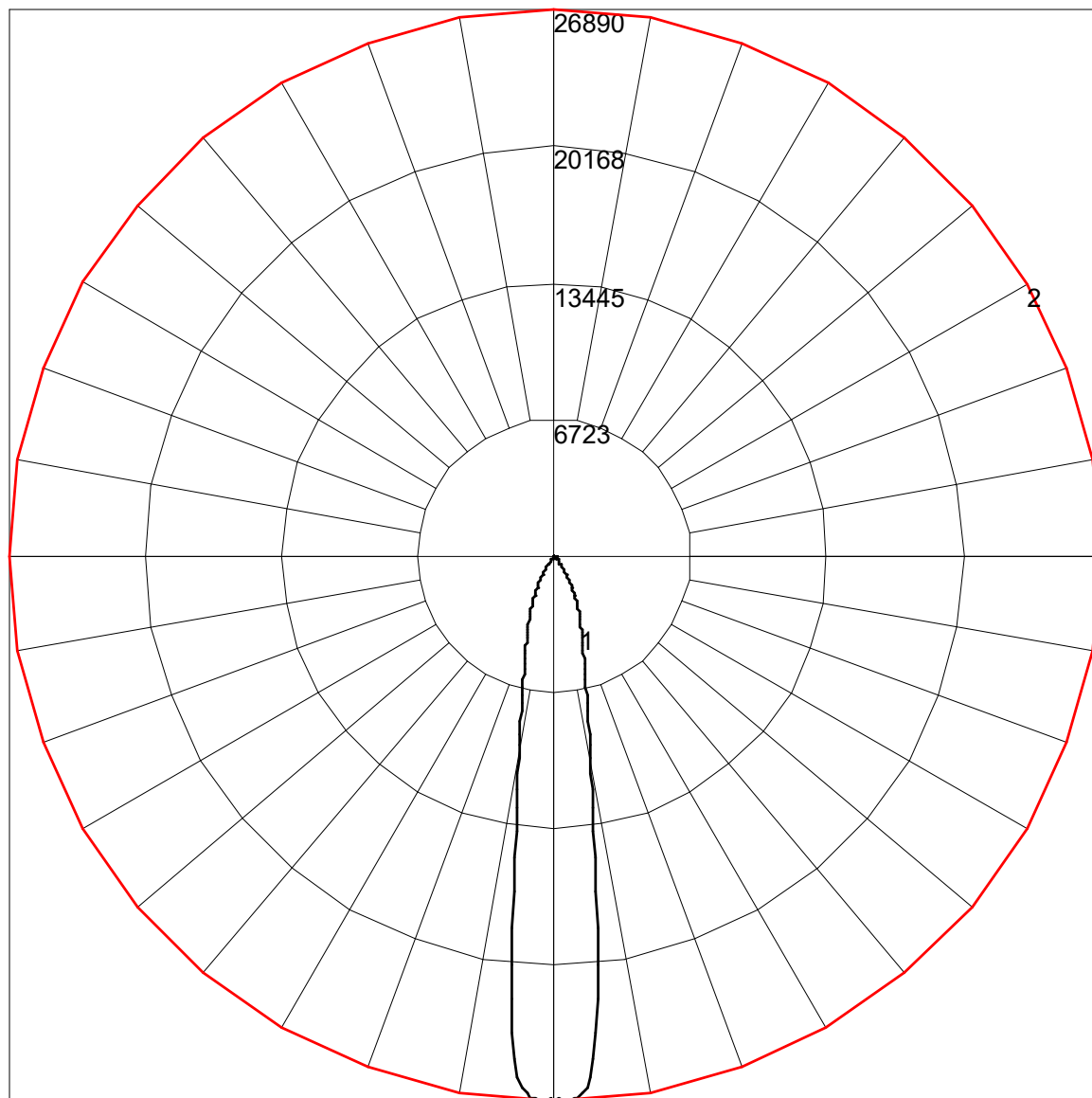
X=2H	Y=2H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	3H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	4H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	6H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	8H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	12H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6

### UGR Viewed Endwise

4H	2H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	3H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	4H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	6H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	8H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	12H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
8H	4H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	6H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	8H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	12H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
12H	4H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	6H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	8H	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6

Maximum UGR = 5.6

POLAR GRAPH



Maximum Candela = 26890 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.)