



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 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-L10-835-xxx-DIM-UNV-ON-WH-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	890
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	9
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	639	639	639
55	166	166	166
65	56	56	56
75	92	92	92
85	0	0	0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

CANDELA TABULATION

	<u>0</u>
0.0	6909.467
0.5	6882.601
1.0	6823.984
1.5	6706.751
2.0	6543.112
2.5	6315.971
3.0	6015.560
3.5	5658.973
4.0	5258.425
4.5	4840.779
5.0	4413.364
5.5	4015.258
6.0	3641.575
6.5	3289.874
7.0	2962.596
7.5	2676.839
8.0	2438.219
8.5	2243.562
9.0	2080.900
9.5	1938.510
10.0	1810.530
10.5	1696.959
11.0	1595.112
11.5	1506.210
12.0	1428.299
12.5	1356.493
13.0	1289.816
13.5	1227.047
14.0	1170.873
14.5	1119.827
15.0	1072.689
15.5	1028.238
16.0	985.252
16.5	943.976
17.0	904.410
17.5	867.530
18.0	831.627
18.5	796.946
19.0	763.729
19.5	731.246
20.0	698.762
20.5	666.279
21.0	635.505
21.5	606.196
22.0	577.132
22.5	549.045
23.0	521.935
23.5	497.022
24.0	475.041
24.5	455.258
25.0	437.673
25.5	422.530
26.0	409.341
26.5	397.374

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

CANDELA TABULATION - (Cont.)

27.0	385.895
27.5	373.683
28.0	358.784
28.5	340.955
29.0	320.195
29.5	296.504
30.0	270.615
30.5	244.481
31.0	218.104
31.5	190.505
32.0	162.418
32.5	134.575
33.0	108.930
33.5	86.216
34.0	66.188
34.5	49.092
35.0	34.926
35.5	24.179
36.0	17.585
36.5	13.922
37.0	11.479
37.5	10.258
38.0	9.769
38.5	9.281
39.0	8.793
39.5	8.304
40.0	8.060
40.5	7.571
41.0	7.327
41.5	6.839
42.0	6.594
42.5	6.106
43.0	5.862
43.5	5.617
44.0	5.373
44.5	4.885
45.0	4.641
45.5	4.396
46.0	4.152
46.5	3.908
47.0	3.664
47.5	3.419
48.0	3.175
48.5	2.931
49.0	2.687
49.5	2.442
50.0	2.198
50.5	1.954
51.0	1.954
51.5	1.710
52.0	1.710
52.5	1.465
53.0	1.465
53.5	1.221
54.0	1.221
54.5	1.221

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

CANDELA TABULATION - (Cont.)

55.0	0.977
55.5	0.977
56.0	0.977
56.5	0.977
57.0	0.733
57.5	0.733
58.0	0.733
58.5	0.733
59.0	0.733
59.5	0.733
60.0	0.488
60.5	0.488
61.0	0.488
61.5	0.488
62.0	0.488
62.5	0.488
63.0	0.488
63.5	0.488
64.0	0.488
64.5	0.244
65.0	0.244
65.5	0.244
66.0	0.244
66.5	0.244
67.0	0.244
67.5	0.244
68.0	0.244
68.5	0.244
69.0	0.244
69.5	0.244
70.0	0.244
70.5	0.244
71.0	0.244
71.5	0.244
72.0	0.244
72.5	0.244
73.0	0.244
73.5	0.244
74.0	0.244
74.5	0.244
75.0	0.244
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

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
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

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
120.0	0.000
120.5	0.000
121.0	0.000
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
123.5	0.000
124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
132.0	0.000
132.5	0.000
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

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

CANDELA TABULATION - (Cont.)

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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	632.04	N.A.	71.00
0-30	839.60	N.A.	94.30
0-40	884.85	N.A.	99.40
0-60	889.57	N.A.	99.90
0-80	890.05	N.A.	100.00
0-90	890.05	N.A.	100.00
10-90	561.98	N.A.	63.10
20-40	252.81	N.A.	28.40
20-50	256.49	N.A.	28.80
40-70	5.07	N.A.	0.60
60-80	0.48	N.A.	0.10
70-80	0.13	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	890.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	328.07
10-20	303.97
20-30	207.56
30-40	45.25
40-50	3.68
50-60	1.04
60-70	0.34
70-80	0.13
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

IES INDOOR REPORT

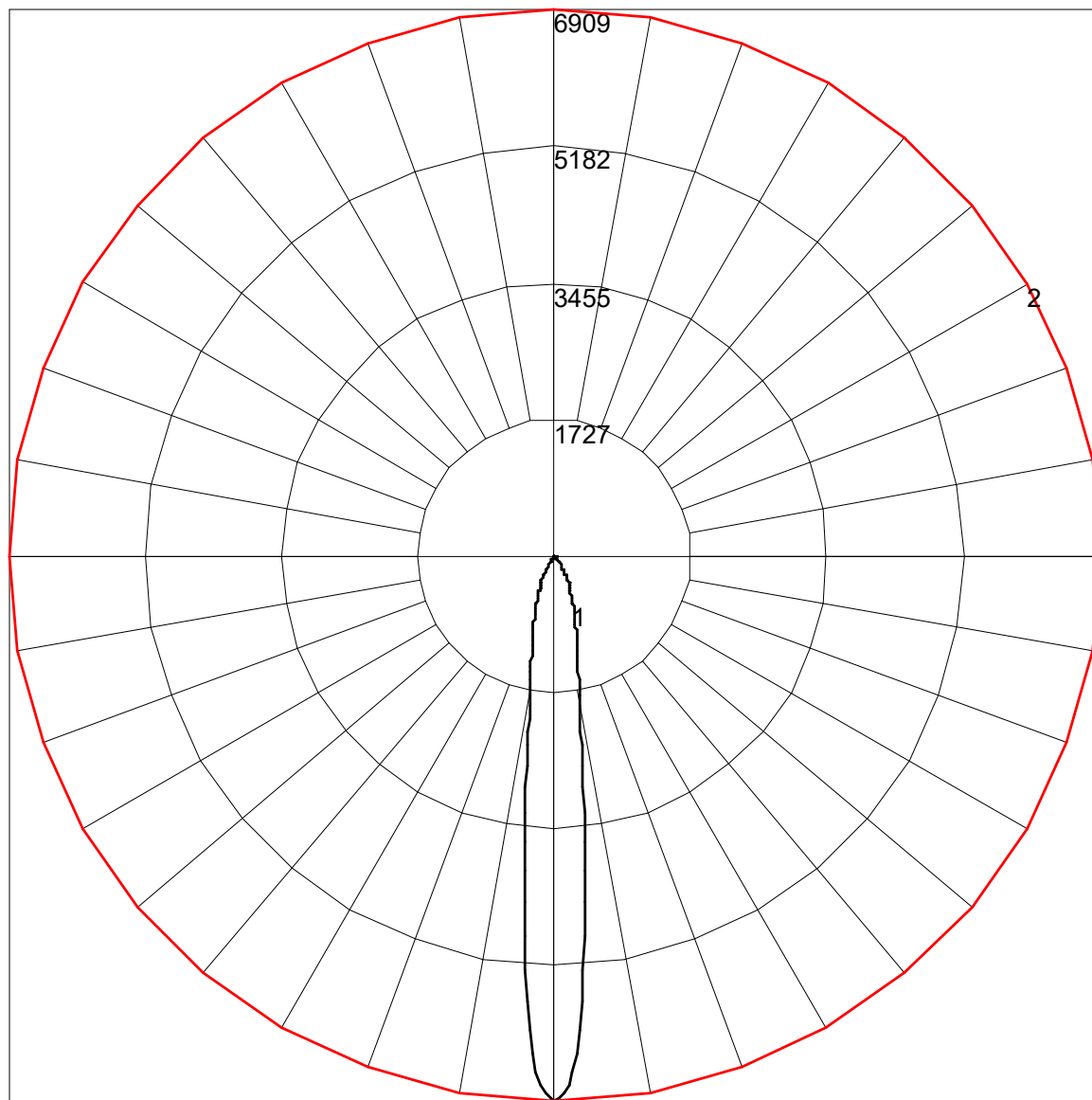
PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-ON-WH-XX_.IES

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

POLAR GRAPH



Maximum Candela = 6909.467 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.)