

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-XX-L50-835-XXX-DIM-UNV-RW-WH-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12316380.12

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 11-JUL-2025

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6CR-TL-L50-835-xxx-DIM-UNV-RW-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	3292
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	65
Total Luminaire Watts	50.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.98
Spacing Criterion (90-270)	0.98
Spacing Criterion (Diagonal)	0.88
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	76158	76158	76158
55	61494	61494	61494
65	39781	39781	39781
75	22183	22183	22183
85	11396	11396	11396

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CANDELA TABULATION

	<u>0</u>
0.0	2644.744
0.5	2644.744
1.0	2642.256
1.5	2637.280
2.0	2632.304
2.5	2627.328
3.0	2619.864
3.5	2612.400
4.0	2604.936
4.5	2594.984
5.0	2587.520
5.5	2577.568
6.0	2567.616
6.5	2557.664
7.0	2547.712
7.5	2537.760
8.0	2527.808
8.5	2515.368
9.0	2505.416
9.5	2495.464
10.0	2486.010
10.5	2475.809
11.0	2465.359
11.5	2455.158
12.0	2445.455
12.5	2435.752
13.0	2426.049
13.5	2416.097
14.0	2406.145
14.5	2396.193
15.0	2385.992
15.5	2375.542
16.0	2364.595
16.5	2353.648
17.0	2342.452
17.5	2330.510
18.0	2317.821
18.5	2304.137
19.0	2290.950
19.5	2276.769
20.0	2261.343
20.5	2243.678
21.0	2223.277
21.5	2201.134
22.0	2175.756
22.5	2147.642
23.0	2115.795
23.5	2079.968
24.0	2040.658
24.5	1996.122
25.0	1946.362
25.5	1891.378
26.0	1831.914
26.5	1768.719

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 6CR-TL-XX-L50-835-XXX-DIM-UNV-RW-WH-XX_.IES****CANDELA TABULATION - (Cont.)**

27.0	1702.290
27.5	1634.865
28.0	1564.206
28.5	1494.293
29.0	1424.629
29.5	1354.965
30.0	1286.545
30.5	1219.369
31.0	1155.925
31.5	1094.471
32.0	1036.501
32.5	982.511
33.0	932.502
33.5	887.470
34.0	846.915
34.5	811.586
35.0	780.486
35.5	754.113
36.0	730.974
36.5	711.568
37.0	694.401
37.5	679.722
38.0	666.286
38.5	654.344
39.0	643.646
39.5	633.942
40.0	625.234
40.5	617.024
41.0	609.062
41.5	601.847
42.0	594.632
42.5	587.914
43.0	581.197
43.5	574.230
44.0	567.264
44.5	560.298
45.0	553.082
45.5	545.618
46.0	537.906
46.5	529.944
47.0	521.734
47.5	513.274
48.0	504.815
48.5	495.858
49.0	486.653
49.5	476.950
50.0	467.246
50.5	457.294
51.0	446.845
51.5	436.644
52.0	426.194
52.5	415.745
53.0	405.793
53.5	394.846
54.0	383.898
54.5	372.951

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 6CR-TL-XX-L50-835-XXX-DIM-UNV-RW-WH-XX_.IES****CANDELA TABULATION - (Cont.)**

55.0	362.253
55.5	351.306
56.0	340.607
56.5	330.158
57.0	319.708
57.5	309.258
58.0	299.058
58.5	289.106
59.0	279.154
59.5	269.450
60.0	259.747
60.5	250.293
61.0	241.087
61.5	231.882
62.0	223.174
62.5	214.217
63.0	205.758
63.5	197.050
64.0	188.839
64.5	180.629
65.0	172.667
65.5	164.706
66.0	156.993
66.5	149.529
67.0	142.314
67.5	135.098
68.0	128.132
68.5	121.166
69.0	114.448
69.5	107.979
70.0	102.008
70.5	96.286
71.0	91.061
71.5	86.085
72.0	81.358
72.5	76.879
73.0	72.650
73.5	68.918
74.0	65.186
74.5	61.951
75.0	58.966
75.5	56.229
76.0	53.243
76.5	50.506
77.0	47.770
77.5	45.033
78.0	42.545
78.5	39.808
79.0	37.320
79.5	34.832
80.0	32.344
80.5	29.856
81.0	27.617
81.5	25.378
82.0	22.890
82.5	20.899

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83.0	18.660
83.5	16.421
84.0	14.430
84.5	12.191
85.0	10.201
85.5	8.459
86.0	6.718
86.5	5.474
87.0	4.230
87.5	3.234
88.0	2.239
88.5	1.493
89.0	0.746
89.5	0.249
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-XX-L50-835-XXX-DIM-UNV-RW-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

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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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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

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Zone	Lumens	%Lamp	%Fixt
0-20	915.44	N.A.	27.80
0-30	1771.49	N.A.	53.80
0-40	2293.16	N.A.	69.60
0-60	3041.07	N.A.	92.40
0-80	3279.04	N.A.	99.60
0-90	3292.49	N.A.	100.00
10-90	3048.91	N.A.	92.60
20-40	1377.72	N.A.	41.80
20-50	1802.16	N.A.	54.70
40-70	920.89	N.A.	28.00
60-80	237.97	N.A.	7.20
70-80	64.99	N.A.	2.00
80-90	13.46	N.A.	0.40
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	3292.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	243.58
10-20	671.85
20-30	856.05
30-40	521.67
40-50	424.44
50-60	323.47
60-70	172.98
70-80	64.99
80-90	13.46
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	149	149	149	149	145	145	145	145	139	139	139	133	133	133	127	127	127	125
1	139	135	131	128	136	132	129	125	127	124	122	122	120	118	118	116	114	112
2	130	122	116	111	127	120	114	109	116	111	107	112	108	105	109	105	102	100
3	122	111	104	97	119	110	102	97	106	100	95	103	98	93	100	96	92	90
4	114	102	93	87	111	100	92	86	98	91	85	95	89	84	92	87	83	81
5	107	94	85	78	104	92	84	78	90	83	77	88	81	76	86	80	76	73
6	100	87	78	71	98	85	77	71	83	76	70	82	75	70	80	74	69	67
7	94	80	71	65	92	79	71	65	78	70	64	76	69	64	74	68	64	62
8	89	75	66	60	87	74	66	60	73	65	59	71	64	59	70	64	59	57
9	84	70	61	56	82	69	61	55	68	60	55	67	60	55	66	59	55	53
10	80	66	57	52	78	65	57	52	64	57	51	63	56	51	62	56	51	49

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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	23.0	24.3	23.4	24.6	24.9	23.0	24.3	23.4	24.6	24.9
	3H	23.8	24.9	24.1	25.3	25.6	23.8	24.9	24.1	25.3	25.6
	4H	24.0	25.0	24.4	25.4	25.8	24.0	25.0	24.4	25.4	25.8
	6H	24.1	25.0	24.5	25.4	25.8	24.1	25.0	24.5	25.4	25.8
	8H	24.1	25.0	24.5	25.4	25.8	24.1	25.0	24.5	25.4	25.8
	12H	24.0	24.9	24.5	25.3	25.8	24.0	24.9	24.5	25.3	25.8

UGR Viewed Endwise

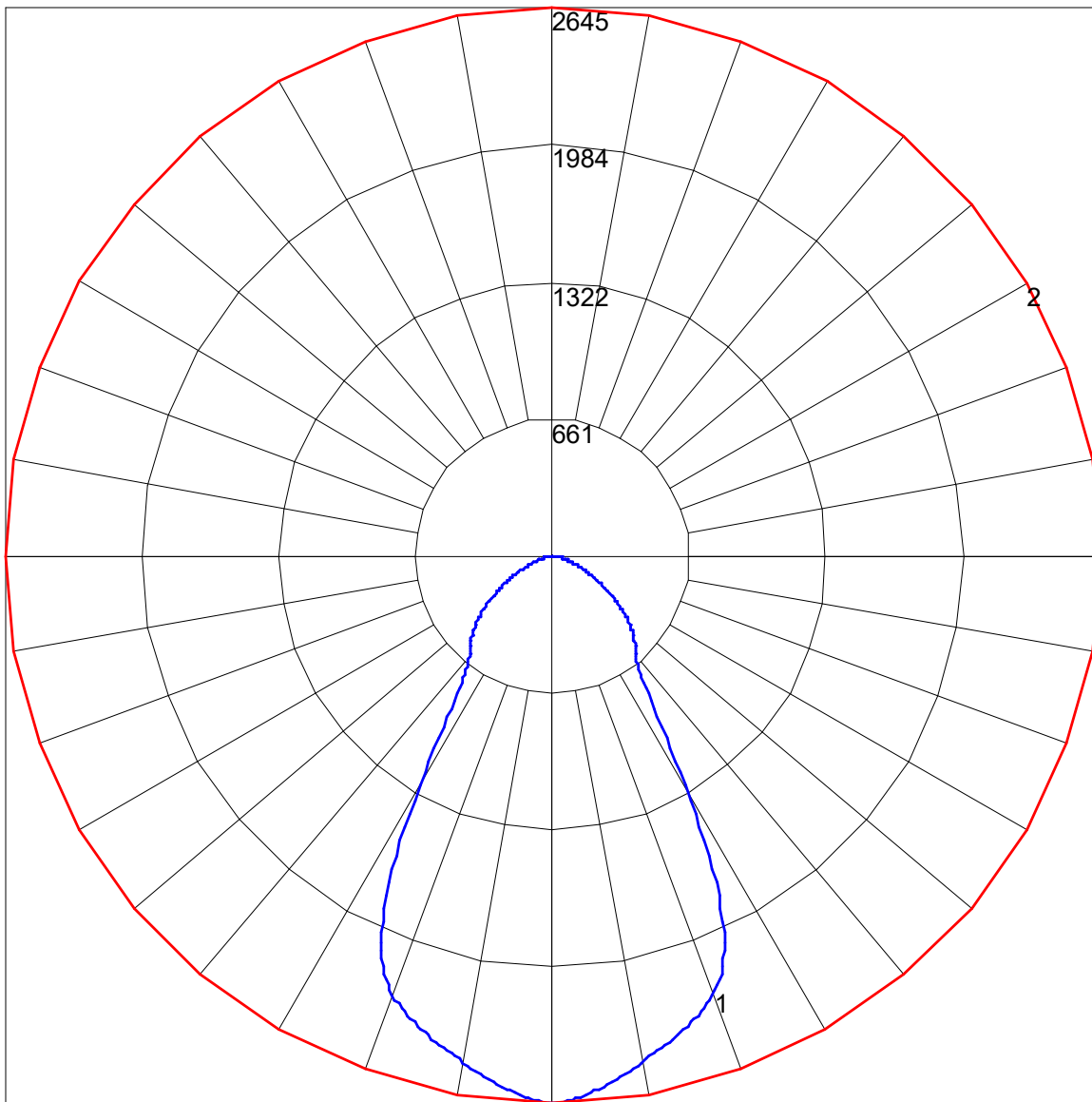
4H	2H	23.3	24.4	23.7	24.7	25.1	23.3	24.4	23.7	24.7	25.1
	3H	24.2	25.1	24.6	25.5	25.9	24.2	25.1	24.6	25.5	25.9
	4H	24.4	25.2	24.8	25.6	26.1	24.4	25.2	24.8	25.6	26.1
	6H	24.6	25.3	25.1	25.7	26.2	24.6	25.3	25.1	25.7	26.2
	8H	24.6	25.3	25.1	25.7	26.2	24.6	25.3	25.1	25.7	26.2
	12H	24.6	25.2	25.1	25.7	26.1	24.6	25.2	25.1	25.7	26.1

8H	4H	24.5	25.1	24.9	25.5	26.0	24.5	25.1	24.9	25.5	26.0
	6H	24.7	25.2	25.2	25.7	26.2	24.7	25.2	25.2	25.7	26.2
	8H	24.7	25.2	25.3	25.7	26.2	24.7	25.2	25.3	25.7	26.2
	12H	24.8	25.2	25.3	25.7	26.2	24.8	25.2	25.3	25.7	26.2

12H	4H	24.4	25.0	24.9	25.5	25.9	24.4	25.0	24.9	25.5	25.9
	6H	24.7	25.1	25.2	25.6	26.1	24.7	25.1	25.2	25.6	26.1
	8H	24.8	25.2	25.3	25.6	26.2	24.8	25.2	25.3	25.6	26.2

Maximum UGR = 26.2

POLAR GRAPH



Maximum Candela = 2644.744 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)