



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-L70-935-XXX-DIM-UNV-OM-WH-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 12316380.22
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 06-16-2023
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6CR-TL-L70-935-xxx-DIM-UNV-OM-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	5175
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	58.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.56
Spacing Criterion (90-270)	0.56
Spacing Criterion (Diagonal)	0.74
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	12685	12685	12685
55	3705	3705	3705
65	1326	1326	1326
75	605	605	605
85	449	449	449

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CANDELA TABULATION

	<u>0</u>
0.0	10853.464
0.5	10872.209
1.0	10880.243
1.5	10874.887
2.0	10856.142
2.5	10829.363
3.0	10771.789
3.5	10704.842
4.0	10611.116
4.5	10487.933
5.0	10331.277
5.5	10141.147
6.0	9947.000
6.5	9718.041
7.0	9475.693
7.5	9219.955
8.0	8956.183
8.5	8692.412
9.0	8429.979
9.5	8171.563
10.0	7922.520
10.5	7686.866
11.0	7461.924
11.5	7253.049
12.0	7061.580
12.5	6880.823
13.0	6716.133
13.5	6564.833
14.0	6426.922
14.5	6295.706
15.0	6173.862
15.5	6058.713
16.0	5955.614
16.5	5864.566
17.0	5780.213
17.5	5701.215
18.0	5626.234
18.5	5551.254
19.0	5481.629
19.5	5414.682
20.0	5353.090
20.5	5292.838
21.0	5231.247
21.5	5168.316
22.0	5098.691
22.5	5023.711
23.0	4942.035
23.5	4853.665
24.0	4755.922
24.5	4646.129
25.0	4525.624
25.5	4391.730
26.0	4241.768
26.5	4073.062

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CANDELA TABULATION - (Cont.)

27.0	3888.288
27.5	3687.446
28.0	3473.216
28.5	3242.918
29.0	2993.874
29.5	2736.798
30.0	2473.026
30.5	2207.915
31.0	1946.822
31.5	1696.440
32.0	1455.430
32.5	1233.300
33.0	1030.450
33.5	845.810
34.0	687.948
34.5	555.527
35.0	449.349
35.5	367.540
36.0	305.413
36.5	260.290
37.0	230.968
37.5	212.356
38.0	199.101
38.5	187.318
39.0	176.740
39.5	167.100
40.0	157.995
40.5	149.560
41.0	141.660
41.5	134.162
42.0	127.333
42.5	120.639
43.0	114.346
43.5	108.320
44.0	102.563
44.5	97.207
45.0	92.119
45.5	87.165
46.0	82.345
46.5	77.525
47.0	72.838
47.5	68.152
48.0	63.600
48.5	59.449
49.0	55.432
49.5	51.415
50.0	47.532
50.5	43.650
51.0	40.436
51.5	37.356
52.0	34.545
52.5	32.001
53.0	29.591
53.5	27.448
54.0	25.306
54.5	23.565

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CANDELA TABULATION - (Cont.)

55.0	21.825
55.5	20.218
56.0	19.013
56.5	17.540
57.0	16.335
57.5	15.264
58.0	14.327
58.5	13.389
59.0	12.452
59.5	11.783
60.0	10.979
60.5	10.310
61.0	9.640
61.5	8.971
62.0	8.569
62.5	7.900
63.0	7.498
63.5	6.962
64.0	6.561
64.5	6.159
65.0	5.757
65.5	5.490
66.0	5.088
66.5	4.954
67.0	4.552
67.5	4.285
68.0	4.017
68.5	3.749
69.0	3.481
69.5	3.347
70.0	3.213
70.5	2.946
71.0	2.678
71.5	2.678
72.0	2.410
72.5	2.276
73.0	2.008
73.5	1.875
74.0	1.741
74.5	1.741
75.0	1.607
75.5	1.473
76.0	1.473
76.5	1.339
77.0	1.205
77.5	1.205
78.0	1.071
78.5	0.937
79.0	0.937
79.5	0.937
80.0	0.803
80.5	0.669
81.0	0.803
81.5	0.669
82.0	0.669
82.5	0.669

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CANDELA TABULATION - (Cont.)

83.0	0.536
83.5	0.536
84.0	0.402
84.5	0.402
85.0	0.402
85.5	0.402
86.0	0.402
86.5	0.268
87.0	0.268
87.5	0.268
88.0	0.268
88.5	0.268
89.0	0.268
89.5	0.268
90.0	0.134
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

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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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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

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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	2659.14	N.A.	51.40
0-30	4613.71	N.A.	89.10
0-40	5072.91	N.A.	98.00
0-60	5167.06	N.A.	99.80
0-80	5175.00	N.A.	100.00
0-90	5175.48	N.A.	100.00
10-90	4272.71	N.A.	82.60
20-40	2413.78	N.A.	46.60
20-50	2486.47	N.A.	48.00
40-70	100.27	N.A.	1.90
60-80	7.94	N.A.	0.20
70-80	1.82	N.A.	0.00
80-90	0.48	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	5175.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	902.77
10-20	1756.37
20-30	1954.58
30-40	459.20
40-50	72.69
50-60	21.45
60-70	6.12
70-80	1.82
80-90	0.48
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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	98	98	97	95
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	91	90
3	105	99	95	91	103	98	94	91	95	92	89	93	90	88	91	89	87	85
4	101	94	89	86	99	93	88	85	91	87	84	89	86	83	87	84	82	81
5	96	89	84	80	95	88	84	80	87	82	79	85	81	79	83	80	78	77
6	92	85	80	76	91	84	79	76	83	78	75	81	77	75	80	77	74	73
7	89	81	75	72	87	80	75	72	79	74	71	78	74	71	77	73	71	69
8	85	77	72	68	84	76	71	68	75	71	68	74	70	67	73	70	67	66
9	82	73	68	65	81	73	68	65	72	68	65	71	67	64	71	67	64	63
10	79	70	65	62	78	70	65	62	69	65	62	68	64	61	68	64	61	60

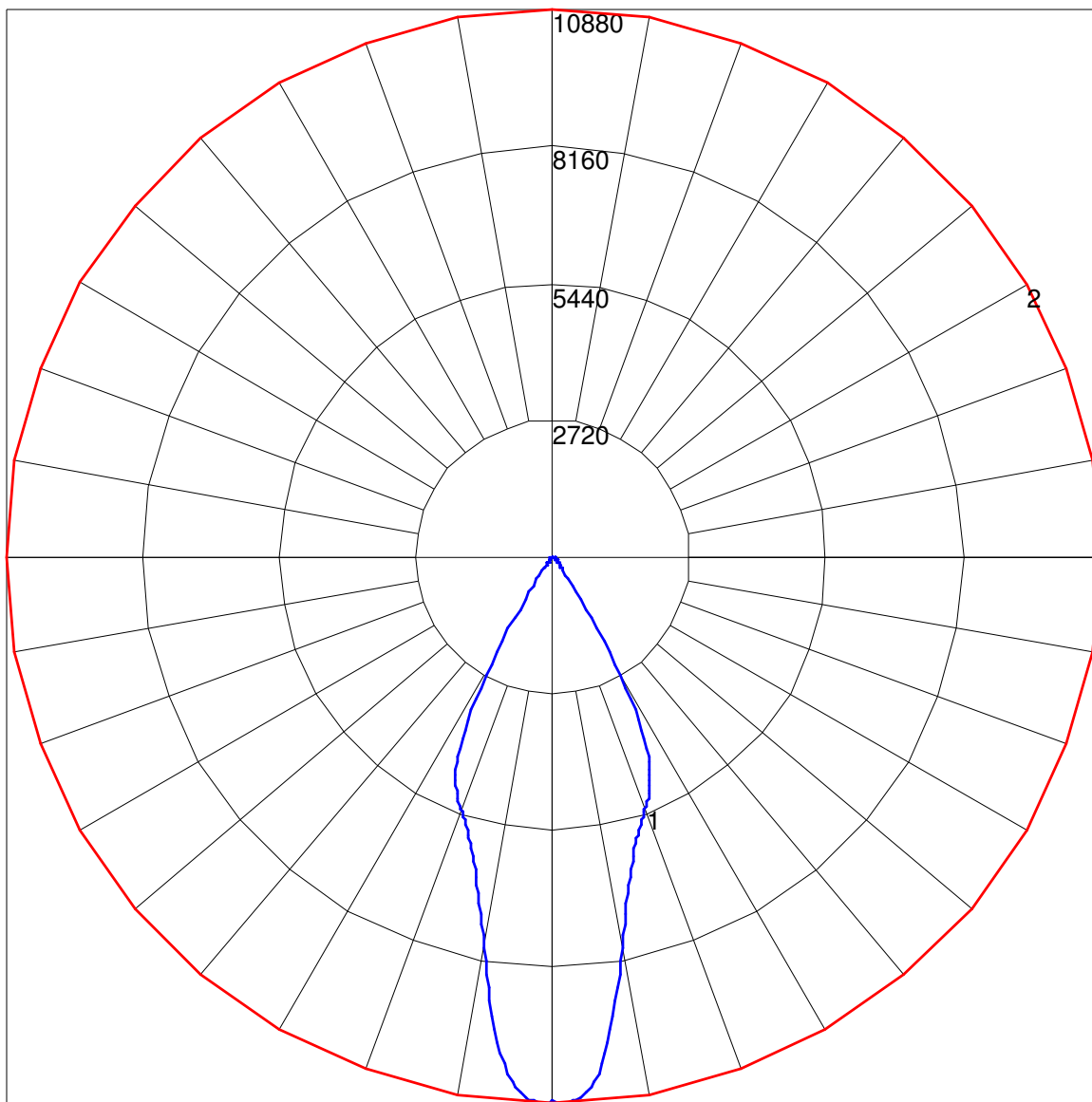
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UGR TABLE - CORRECTED

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	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	3H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	4H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	6H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	8H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	12H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
4H	2H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	3H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	4H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	6H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	8H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	12H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
8H	4H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	6H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	8H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	12H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
12H	4H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	6H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	8H	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8

Maximum UGR = 5.8

POLAR GRAPH



Maximum Candela = 10880.243 Located At Horizontal Angle = 0, Vertical Angle = 1
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (1) (Through Max. Cd.)