



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-L10-927-XXX-DIM-UNV-OM-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12316380.04

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 26-JAN-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6CR-TL-L10-927-xxx-DIM-UNV-OM-CS-xx

[LUMINAIRE] 6" ROUND SURFACE CYLINDER

[LAMP] One white LED

[_SEARCH_SOURCE TYPE] 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	739
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	82
Total Luminaire Watts	9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.56
Spacing Criterion (90-270)	0.56
Spacing Criterion (Diagonal)	0.76
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	1836	1836	1836
55	533	533	533
65	187	187	187
75	84	84	84
85	41	41	41

CANDELA TABULATION

	<u>0</u>
0.0	1495.875
0.5	1496.983
1.0	1501.414
1.5	1505.476
2.0	1514.707
2.5	1520.616
3.0	1521.723
3.5	1522.093
4.0	1513.600
4.5	1502.153
5.0	1480.366
5.5	1452.672
6.0	1421.654
6.5	1386.943
7.0	1349.279
7.5	1310.137
8.0	1269.888
8.5	1230.007
9.0	1190.866
9.5	1152.832
10.0	1116.644
10.5	1082.672
11.0	1050.916
11.5	1021.006
12.0	992.573
12.5	965.986
13.0	940.876
13.5	916.874
14.0	893.980
14.5	872.932
15.0	853.731
15.5	836.745
16.0	822.713
16.5	810.158
17.0	798.342
17.5	788.002
18.0	778.771
18.5	771.016
19.0	765.477
19.5	760.677
20.0	756.615
20.5	751.815
21.0	747.014
21.5	741.845
22.0	736.306
22.5	729.290
23.0	720.797
23.5	710.458
24.0	697.533
24.5	680.547
25.0	660.977
25.5	640.298
26.0	619.989
26.5	597.464

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CANDELA TABULATION - (Cont.)

27.0	573.831
27.5	546.875
28.0	516.226
28.5	482.624
29.0	447.544
29.5	411.726
30.0	373.692
30.5	334.292
31.0	293.045
31.5	251.947
32.0	212.436
32.5	175.473
33.0	143.310
33.5	115.874
34.0	92.758
34.5	73.557
35.0	57.974
35.5	46.231
36.0	38.699
36.5	34.747
37.0	32.384
37.5	30.316
38.0	28.507
38.5	26.845
39.0	25.331
39.5	23.965
40.0	22.673
40.5	21.454
41.0	20.309
41.5	19.275
42.0	18.278
42.5	17.355
43.0	16.432
43.5	15.620
44.0	14.807
44.5	14.032
45.0	13.330
45.5	12.629
46.0	11.927
46.5	11.262
47.0	10.561
47.5	9.896
48.0	9.268
48.5	8.678
49.0	8.087
49.5	7.496
50.0	6.905
50.5	6.351
51.0	5.871
51.5	5.428
52.0	4.985
52.5	4.616
53.0	4.246
53.5	3.951
54.0	3.656
54.5	3.360

CANDELA TABULATION - (Cont.)

55.0	3.139
55.5	2.917
56.0	2.696
56.5	2.511
57.0	2.326
57.5	2.179
58.0	2.031
58.5	1.883
59.0	1.772
59.5	1.662
60.0	1.551
60.5	1.440
61.0	1.366
61.5	1.255
62.0	1.182
62.5	1.108
63.0	1.034
63.5	0.997
64.0	0.923
64.5	0.849
65.0	0.812
65.5	0.775
66.0	0.702
66.5	0.665
67.0	0.628
67.5	0.591
68.0	0.554
68.5	0.517
69.0	0.480
69.5	0.443
70.0	0.406
70.5	0.406
71.0	0.369
71.5	0.332
72.0	0.295
72.5	0.295
73.0	0.258
73.5	0.258
74.0	0.222
74.5	0.222
75.0	0.222
75.5	0.185
76.0	0.185
76.5	0.148
77.0	0.148
77.5	0.148
78.0	0.111
78.5	0.111
79.0	0.111
79.5	0.111
80.0	0.074
80.5	0.074
81.0	0.074
81.5	0.074
82.0	0.074
82.5	0.074

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CANDELA TABULATION - (Cont.)

83.0	0.074
83.5	0.037
84.0	0.037
84.5	0.037
85.0	0.037
85.5	0.037
86.0	0.037
86.5	0.037
87.0	0.037
87.5	0.037
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

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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
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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

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
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155.0	0.000
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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
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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

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	372.90	N.A.	50.40
0-30	658.62	N.A.	89.10
0-40	724.58	N.A.	98.00
0-60	738.16	N.A.	99.80
0-80	739.24	N.A.	100.00
0-90	739.28	N.A.	100.00
10-90	611.19	N.A.	82.70
20-40	351.68	N.A.	47.60
20-50	362.18	N.A.	49.00
40-70	14.43	N.A.	2.00
60-80	1.08	N.A.	0.10
70-80	0.23	N.A.	0.00
80-90	0.04	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	739.28	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	128.09
10-20	244.81
20-30	285.73
30-40	65.96
40-50	10.50
50-60	3.08
60-70	0.85
70-80	0.23
80-90	0.04
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

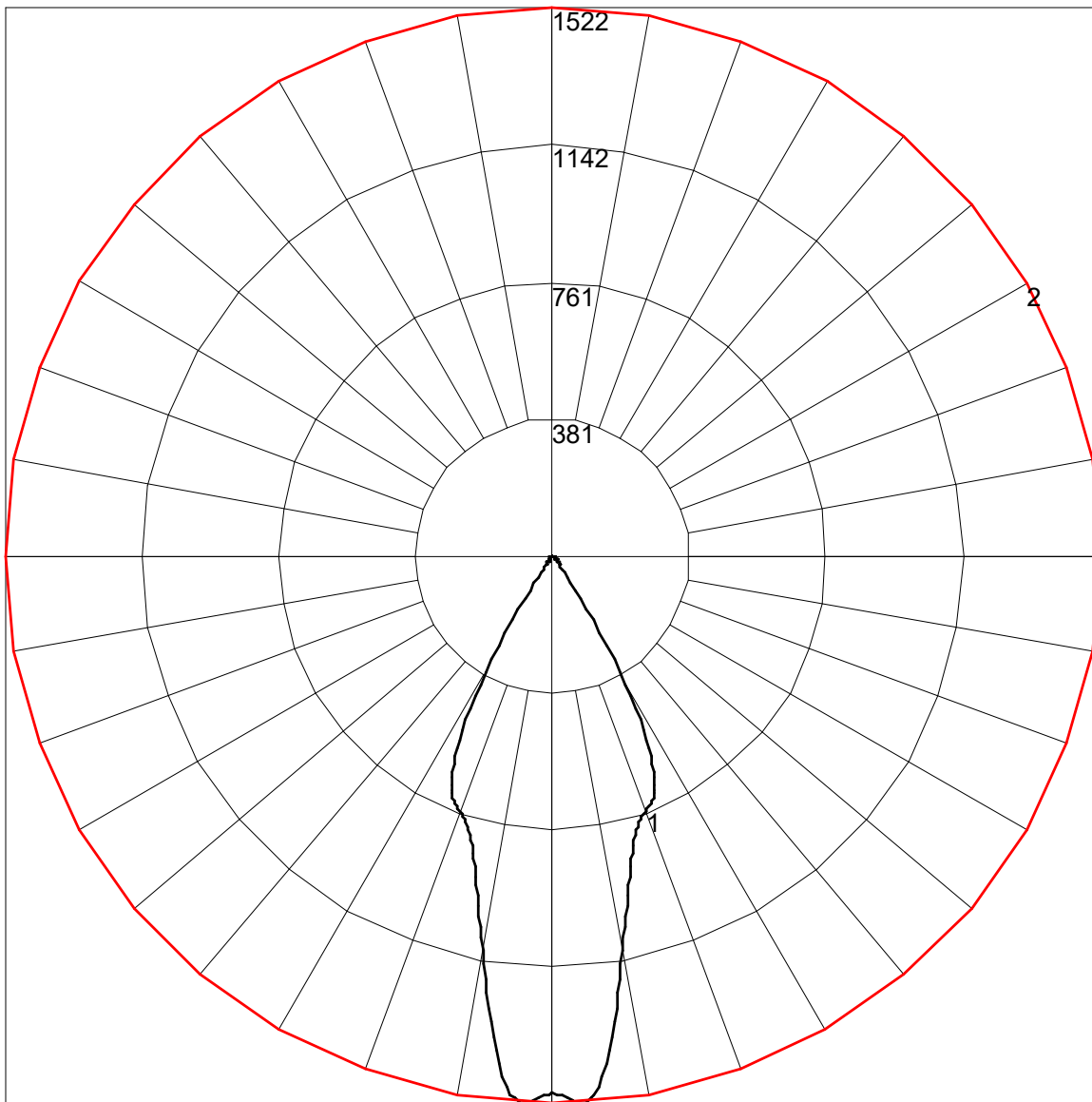
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	99	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	100	94	89	85	99	93	88	85	91	87	84	89	86	83	87	84	82	81
5	96	89	84	80	95	88	83	80	86	82	79	85	81	79	83	80	78	77
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73
7	89	81	75	72	87	80	75	71	79	74	71	78	74	71	76	73	70	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	67	64	71	67	64	70	67	64	63
10	79	70	65	62	78	70	65	62	69	64	61	68	64	61	68	64	61	60

POLAR GRAPH



Maximum Candela = 1522.093 Located At Horizontal Angle = 0, Vertical Angle = 3.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (3.5) (Through Max. Cd.)