



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-L10-835-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] 25-JAN-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6CR-TL-L10-835-xxx-DIM-UNV-OM-CS-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	999
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
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	2480	2480	2480
55	720	720	720
65	253	253	253
75	112	112	112
85	56	56	56

CANDELA TABULATION

	<u>0</u>
0.0	2021.453
0.5	2022.950
1.0	2028.938
1.5	2034.427
2.0	2046.902
2.5	2054.886
3.0	2056.383
3.5	2056.882
4.0	2045.405
4.5	2029.936
5.0	2000.495
5.5	1963.070
6.0	1921.154
6.5	1874.248
7.0	1823.350
7.5	1770.456
8.0	1716.064
8.5	1662.172
9.0	1609.278
9.5	1557.881
10.0	1508.979
10.5	1463.071
11.0	1420.157
11.5	1379.738
12.0	1341.315
12.5	1305.387
13.0	1271.455
13.5	1239.019
14.0	1208.081
14.5	1179.638
15.0	1153.690
15.5	1130.736
16.0	1111.774
16.5	1094.808
17.0	1078.840
17.5	1064.868
18.0	1052.393
18.5	1041.914
19.0	1034.429
19.5	1027.942
20.0	1022.453
20.5	1015.966
21.0	1009.479
21.5	1002.493
22.0	995.008
22.5	985.527
23.0	974.050
23.5	960.078
24.0	942.613
24.5	919.659
25.0	893.212
25.5	865.268
26.0	837.823
26.5	807.384

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CANDELA TABULATION - (Cont.)

27.0	775.448
27.5	739.020
28.0	697.603
28.5	652.194
29.0	604.789
29.5	556.386
30.0	504.989
30.5	451.746
31.0	396.007
31.5	340.468
32.0	287.075
32.5	237.125
33.0	193.662
33.5	156.587
34.0	125.349
34.5	99.401
35.0	78.343
35.5	62.475
36.0	52.295
36.5	46.956
37.0	43.762
37.5	40.968
38.0	38.523
38.5	36.277
39.0	34.231
39.5	32.385
40.0	30.639
40.5	28.992
41.0	27.445
41.5	26.048
42.0	24.701
42.5	23.453
43.0	22.206
43.5	21.108
44.0	20.010
44.5	18.962
45.0	18.014
45.5	17.066
46.0	16.118
46.5	15.220
47.0	14.271
47.5	13.373
48.0	12.525
48.5	11.727
49.0	10.928
49.5	10.130
50.0	9.331
50.5	8.583
51.0	7.934
51.5	7.335
52.0	6.737
52.5	6.238
53.0	5.739
53.5	5.339
54.0	4.940
54.5	4.541

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 6CR-TL-L10-835-XXX-DIM-UNV-OM-CS-XX_.IES****CANDELA TABULATION - (Cont.)**

55.0	4.242
55.5	3.942
56.0	3.643
56.5	3.393
57.0	3.144
57.5	2.944
58.0	2.745
58.5	2.545
59.0	2.395
59.5	2.246
60.0	2.096
60.5	1.946
61.0	1.846
61.5	1.697
62.0	1.597
62.5	1.497
63.0	1.397
63.5	1.347
64.0	1.248
64.5	1.148
65.0	1.098
65.5	1.048
66.0	0.948
66.5	0.898
67.0	0.848
67.5	0.798
68.0	0.749
68.5	0.699
69.0	0.649
69.5	0.599
70.0	0.549
70.5	0.549
71.0	0.499
71.5	0.449
72.0	0.399
72.5	0.399
73.0	0.349
73.5	0.349
74.0	0.299
74.5	0.299
75.0	0.299
75.5	0.250
76.0	0.250
76.5	0.200
77.0	0.200
77.5	0.200
78.0	0.150
78.5	0.150
79.0	0.150
79.5	0.150
80.0	0.100
80.5	0.100
81.0	0.100
81.5	0.100
82.0	0.100
82.5	0.100

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CANDELA TABULATION - (Cont.)

83.0	0.100
83.5	0.050
84.0	0.050
84.5	0.050
85.0	0.050
85.5	0.050
86.0	0.050
86.5	0.050
87.0	0.050
87.5	0.050
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

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
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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
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132.5	0.000
133.0	0.000
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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
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146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
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150.0	0.000
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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	503.91	N.A.	50.40
0-30	890.03	N.A.	89.10
0-40	979.16	N.A.	98.00
0-60	997.51	N.A.	99.80
0-80	998.97	N.A.	100.00
0-90	999.03	N.A.	100.00
10-90	825.94	N.A.	82.70
20-40	475.25	N.A.	47.60
20-50	489.43	N.A.	49.00
40-70	19.50	N.A.	2.00
60-80	1.46	N.A.	0.10
70-80	0.31	N.A.	0.00
80-90	0.06	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	999.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	173.09
10-20	330.82
20-30	386.12
30-40	89.13
40-50	14.18
50-60	4.17
60-70	1.15
70-80	0.31
80-90	0.06
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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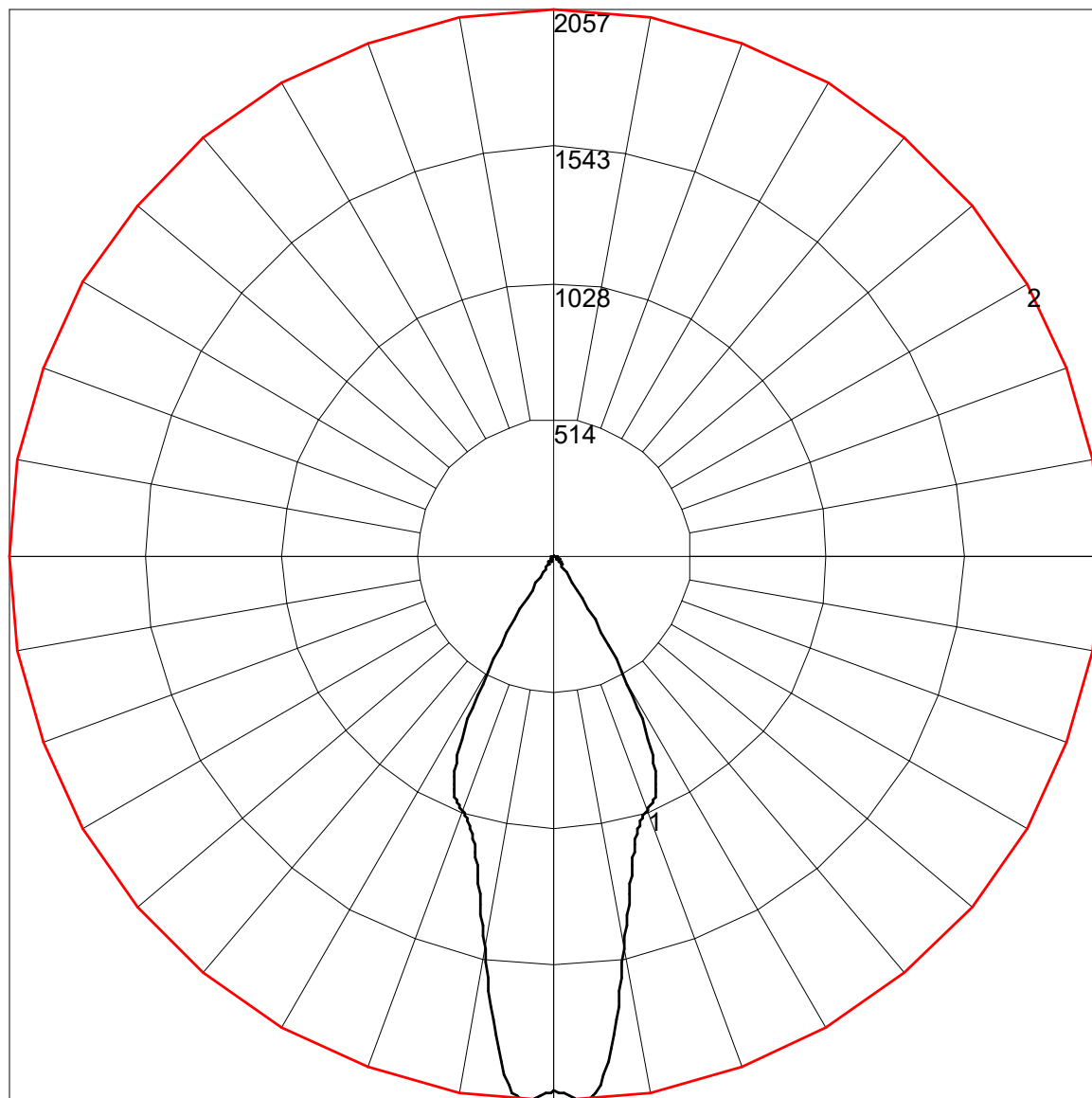
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	97	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	88	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	78	83	80	78	76
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73
7	89	80	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	67	64	61	60

POLAR GRAPH



Maximum Candela = 2056.882 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.)