

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-XX-L60-830-XXX-DIM-UNV-RW-SG-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12316380.12

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 03/26/2025

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6CR-TL-L60-830-xxx-DIM-UNV-RW-SG-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	3907
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
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	90379	90379	90379
55	72977	72977	72977
65	47209	47209	47209
75	26325	26325	26325
85	13524	13524	13524

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CANDELA TABULATION

	<u>0</u>
0.0	3138.606
0.5	3138.606
1.0	3135.654
1.5	3129.749
2.0	3123.843
2.5	3117.938
3.0	3109.081
3.5	3100.223
4.0	3091.365
4.5	3079.555
5.0	3070.697
5.5	3058.886
6.0	3047.076
6.5	3035.266
7.0	3023.455
7.5	3011.645
8.0	2999.835
8.5	2985.072
9.0	2973.261
9.5	2961.451
10.0	2950.231
10.5	2938.125
11.0	2925.724
11.5	2913.619
12.0	2902.104
12.5	2890.589
13.0	2879.074
13.5	2867.263
14.0	2855.453
14.5	2843.642
15.0	2831.537
15.5	2819.136
16.0	2806.144
16.5	2793.153
17.0	2779.866
17.5	2765.694
18.0	2750.636
18.5	2734.396
19.0	2718.748
19.5	2701.918
20.0	2683.612
20.5	2662.648
21.0	2638.437
21.5	2612.159
22.0	2582.043
22.5	2548.678
23.0	2510.885
23.5	2468.368
24.0	2421.717
24.5	2368.865
25.0	2309.814
25.5	2244.561
26.0	2173.994
26.5	2098.998

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CANDELA TABULATION - (Cont.)

27.0	2020.164
27.5	1940.149
28.0	1856.295
28.5	1773.327
29.0	1690.655
29.5	1607.982
30.0	1526.786
30.5	1447.066
31.0	1371.775
31.5	1298.846
32.0	1230.050
32.5	1165.979
33.0	1106.632
33.5	1053.190
34.0	1005.063
34.5	963.136
35.0	926.228
35.5	894.931
36.0	867.472
36.5	844.442
37.0	824.069
37.5	806.648
38.0	790.704
38.5	776.532
39.0	763.836
39.5	752.321
40.0	741.987
40.5	732.243
41.0	722.795
41.5	714.232
42.0	705.670
42.5	697.698
43.0	689.726
43.5	681.458
44.0	673.191
44.5	664.924
45.0	656.361
45.5	647.504
46.0	638.351
46.5	628.902
47.0	619.159
47.5	609.120
48.0	599.081
48.5	588.452
49.0	577.527
49.5	566.012
50.0	554.497
50.5	542.687
51.0	530.286
51.5	518.180
52.0	505.779
52.5	493.378
53.0	481.568
53.5	468.577
54.0	455.585
54.5	442.594

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CANDELA TABULATION - (Cont.)

55.0	429.898
55.5	416.906
56.0	404.210
56.5	391.809
57.0	379.408
57.5	367.007
58.0	354.902
58.5	343.091
59.0	331.281
59.5	319.766
60.0	308.251
60.5	297.031
61.0	286.106
61.5	275.182
62.0	264.848
62.5	254.218
63.0	244.179
63.5	233.845
64.0	224.102
64.5	214.358
65.0	204.910
65.5	195.462
66.0	186.309
66.5	177.451
67.0	168.888
67.5	160.326
68.0	152.059
68.5	143.791
69.0	135.819
69.5	128.143
70.0	121.056
70.5	114.265
71.0	108.065
71.5	102.160
72.0	96.550
72.5	91.235
73.0	86.216
73.5	81.787
74.0	77.358
74.5	73.520
75.0	69.976
75.5	66.729
76.0	63.185
76.5	59.938
77.0	56.690
77.5	53.442
78.0	50.489
78.5	47.241
79.0	44.289
79.5	41.336
80.0	38.384
80.5	35.431
81.0	32.774
81.5	30.116
82.0	27.164
82.5	24.802

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CANDELA TABULATION - (Cont.)

83.0	22.144
83.5	19.487
84.0	17.125
84.5	14.468
85.0	12.106
85.5	10.039
86.0	7.972
86.5	6.496
87.0	5.019
87.5	3.838
88.0	2.657
88.5	1.772
89.0	0.886
89.5	0.295
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
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95.5	0.000
96.0	0.000
96.5	0.000
97.0	0.000
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98.0	0.000
98.5	0.000
99.0	0.000
99.5	0.000
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100.5	0.000
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106.0	0.000
106.5	0.000
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107.5	0.000
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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
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137.5	0.000
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138.5	0.000

CANDELA TABULATION - (Cont.)

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140.5	0.000
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141.5	0.000
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165.0	0.000
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166.0	0.000
166.5	0.000

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167.0	0.000
167.5	0.000
168.0	0.000
168.5	0.000
169.0	0.000
169.5	0.000
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171.0	0.000
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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	1086.38	N.A.	27.80
0-30	2102.28	N.A.	53.80
0-40	2721.36	N.A.	69.60
0-60	3608.94	N.A.	92.40
0-80	3891.34	N.A.	99.60
0-90	3907.31	N.A.	100.00
10-90	3618.24	N.A.	92.60
20-40	1634.98	N.A.	41.80
20-50	2138.68	N.A.	54.70
40-70	1092.86	N.A.	28.00
60-80	282.40	N.A.	7.20
70-80	77.12	N.A.	2.00
80-90	15.97	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	3907.31	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	289.07
10-20	797.31
20-30	1015.9
30-40	619.08
40-50	503.70
50-60	383.87
60-70	205.28
70-80	77.12
80-90	15.97
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

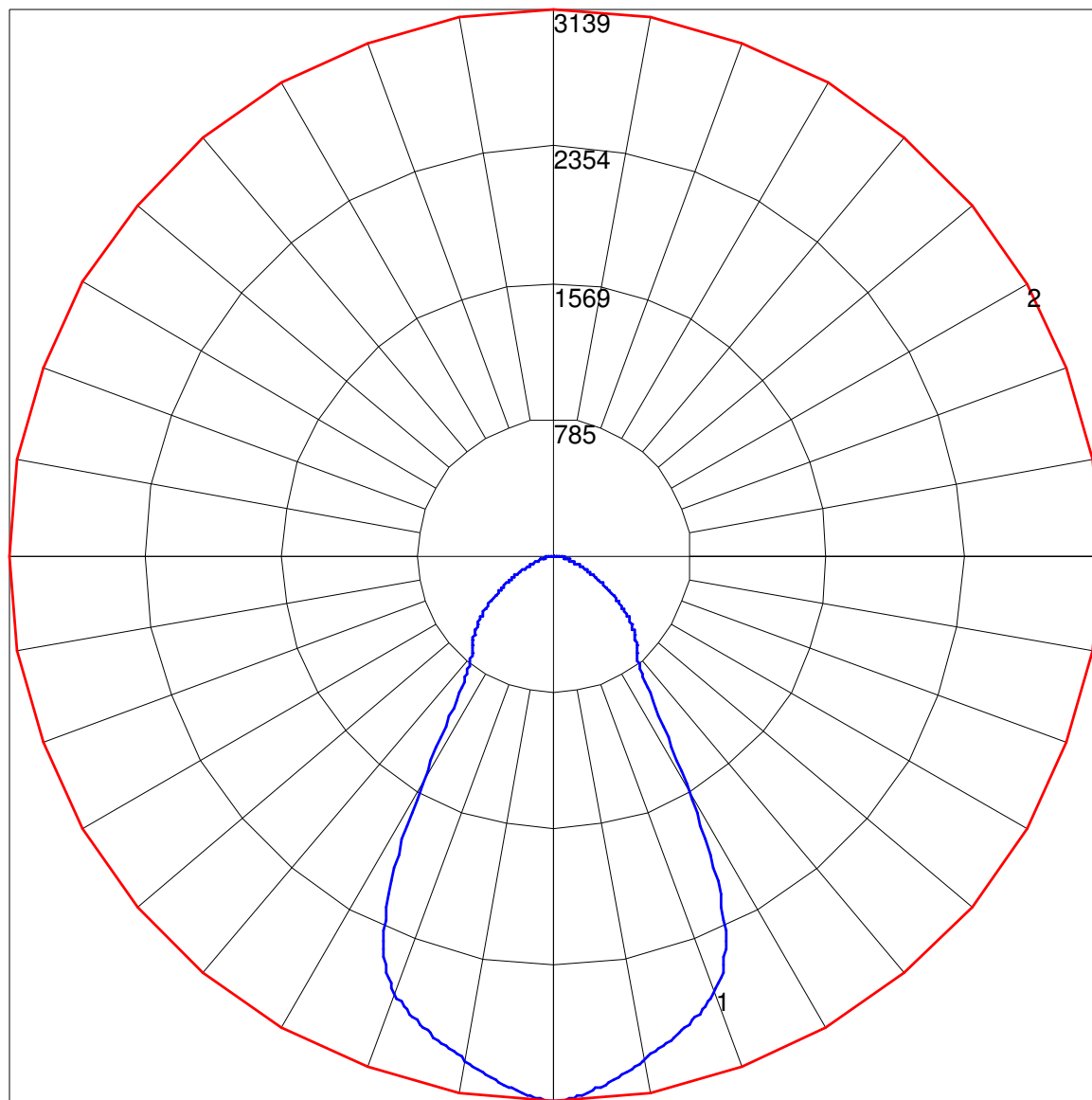
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UGR TABLE - CORRECTED

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	24.4	25.7	24.8	26.0	26.3	24.4	25.7	24.8	26.0	26.3
	3H	25.2	26.3	25.5	26.7	27.0	25.2	26.3	25.5	26.7	27.0
	4H	25.4	26.4	25.8	26.8	27.2	25.4	26.4	25.8	26.8	27.2
	6H	25.5	26.4	25.9	26.8	27.2	25.5	26.4	25.9	26.8	27.2
	8H	25.5	26.4	25.9	26.8	27.2	25.5	26.4	25.9	26.8	27.2
	12H	25.4	26.3	25.9	26.7	27.2	25.4	26.3	25.9	26.7	27.2
4H	2H	24.7	25.8	25.1	26.1	26.5	24.7	25.8	25.1	26.1	26.5
	3H	25.6	26.5	26.0	26.9	27.3	25.6	26.5	26.0	26.9	27.3
	4H	25.8	26.6	26.2	27.0	27.5	25.8	26.6	26.2	27.0	27.5
	6H	26.0	26.7	26.5	27.1	27.6	26.0	26.7	26.5	27.1	27.6
	8H	26.0	26.7	26.5	27.1	27.6	26.0	26.7	26.5	27.1	27.6
	12H	26.0	26.6	26.5	27.1	27.5	26.0	26.6	26.5	27.1	27.5
8H	4H	25.9	26.5	26.3	26.9	27.4	25.9	26.5	26.3	26.9	27.4
	6H	26.1	26.6	26.6	27.1	27.6	26.1	26.6	26.6	27.1	27.6
	8H	26.1	26.6	26.7	27.1	27.6	26.1	26.6	26.7	27.1	27.6
	12H	26.2	26.6	26.7	27.1	27.6	26.2	26.6	26.7	27.1	27.6
12H	4H	25.8	26.4	26.3	26.9	27.3	25.8	26.4	26.3	26.9	27.3
	6H	26.1	26.5	26.6	27.0	27.5	26.1	26.5	26.6	27.0	27.5
	8H	26.2	26.6	26.7	27.0	27.6	26.2	26.6	26.7	27.0	27.6

Maximum UGR = 27.6

POLAR GRAPH



Maximum Candela = 3138.606 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.)