



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L30-840-DIM-UNV-OM-OF-SG_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.04

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 03/12/2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6DR-TL-L30-840-DIM-UNV-OM-OF-SG

[LUMINAIRE] Black formed aluminum housing, specular reflector, no lens

[MORE] enclosure

[LAMP] One white LED

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Healthcare, Office, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2790
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	26.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.58
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.68
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 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	5035	5035	5035
55	1854	1854	1854
65	729	729	729
75	328	328	328
85	265	265	265

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CANDELA TABULATION

	<u>0</u>
0.0	5646.127
0.5	5654.568
1.0	5671.452
1.5	5681.301
2.0	5705.219
2.5	5715.068
3.0	5731.951
3.5	5736.172
4.0	5723.509
4.5	5655.975
5.0	5588.441
5.5	5516.686
6.0	5401.316
6.5	5285.945
7.0	5163.540
7.5	5025.658
8.0	4865.264
8.5	4700.650
9.0	4530.408
9.5	4364.387
10.0	4211.028
10.5	4075.960
11.0	3959.183
11.5	3859.289
12.0	3760.802
12.5	3663.721
13.0	3570.862
13.5	3483.631
14.0	3404.841
14.5	3334.493
15.0	3271.180
15.5	3210.681
16.0	3151.588
16.5	3089.682
17.0	3026.369
17.5	2963.056
18.0	2905.370
18.5	2854.720
19.0	2802.662
19.5	2749.198
20.0	2690.106
20.5	2626.793
21.0	2562.072
21.5	2495.945
22.0	2425.597
22.5	2358.063
23.0	2286.308
23.5	2213.147
24.0	2137.171
24.5	2061.195
25.0	1986.626
25.5	1912.057
26.0	1843.116
26.5	1776.989

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CANDELA TABULATION - (Cont.)

27.0	1715.083
27.5	1655.991
28.0	1602.526
28.5	1554.690
29.0	1509.667
29.5	1466.051
30.0	1411.180
30.5	1342.520
31.0	1263.731
31.5	1177.062
32.0	1089.127
32.5	1000.629
33.0	912.132
33.5	819.272
34.0	725.006
34.5	639.041
35.0	556.452
35.5	478.507
36.0	403.516
36.5	336.404
37.0	281.392
37.5	242.700
38.0	221.877
38.5	207.808
39.0	193.738
39.5	178.824
40.0	162.926
40.5	146.042
41.0	129.862
41.5	114.808
42.0	102.005
42.5	91.874
43.0	83.995
43.5	77.946
44.0	72.880
44.5	68.800
45.0	65.002
45.5	61.766
46.0	58.670
46.5	55.856
47.0	53.042
47.5	50.369
48.0	47.696
48.5	45.023
49.0	42.349
49.5	39.958
50.0	37.707
50.5	35.455
51.0	33.345
51.5	31.234
52.0	29.124
52.5	27.295
53.0	25.466
53.5	23.778
54.0	22.230
54.5	20.823

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CANDELA TABULATION - (Cont.)

55.0	19.416
55.5	18.290
56.0	17.024
56.5	16.039
57.0	15.054
57.5	14.070
58.0	13.225
58.5	12.381
59.0	11.678
59.5	10.974
60.0	10.271
60.5	9.567
61.0	9.005
61.5	8.442
62.0	8.020
62.5	7.598
63.0	7.035
63.5	6.753
64.0	6.331
64.5	5.909
65.0	5.628
65.5	5.206
66.0	4.924
66.5	4.643
67.0	4.362
67.5	4.080
68.0	3.939
68.5	3.658
69.0	3.377
69.5	3.236
70.0	3.095
70.5	2.814
71.0	2.673
71.5	2.533
72.0	2.392
72.5	2.251
73.0	2.110
73.5	1.970
74.0	1.829
74.5	1.688
75.0	1.548
75.5	1.548
76.0	1.407
76.5	1.266
77.0	1.266
77.5	1.126
78.0	1.126
78.5	0.985
79.0	0.985
79.5	0.844
80.0	0.844
80.5	0.703
81.0	0.703
81.5	0.703
82.0	0.563
82.5	0.563

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-840-DIM-UNV-OM-OF-SG_.IES

CANDELA TABULATION - (Cont.)

83.0	0.563
83.5	0.422
84.0	0.422
84.5	0.422
85.0	0.422
85.5	0.281
86.0	0.281
86.5	0.281
87.0	0.281
87.5	0.281
88.0	0.141
88.5	0.141
89.0	0.141
89.5	0.141
90.0	0.141
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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PHOTOMETRIC FILENAME : 6DR-TL-L30-840-DIM-UNV-OM-OF-SG_.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
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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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-840-DIM-UNV-OM-OF-SG_.IES

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
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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
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156.0	0.000
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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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6DR-TL-L30-840-DIM-UNV-OM-OF-SG_.IES

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	1408.04	N.A.	50.50
0-30	2320.1	N.A.	83.20
0-40	2706.05	N.A.	97.00
0-60	2781.9	N.A.	99.70
0-80	2789.54	N.A.	100.00
0-90	2789.97	N.A.	100.00
10-90	2303.48	N.A.	82.60
20-40	1298.02	N.A.	46.50
20-50	1355.23	N.A.	48.60
40-70	81.67	N.A.	2.90
60-80	7.64	N.A.	0.30
70-80	1.81	N.A.	0.10
80-90	0.43	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	2789.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	486.48
10-20	921.55
20-30	912.07
30-40	385.95
40-50	57.21
50-60	18.63
60-70	5.83
70-80	1.81
80-90	0.43
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	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84
4	100	93	88	84	98	92	88	84	90	86	83	88	85	82	86	83	81	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	75	73	72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	75	72	69	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	65	63	62
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59

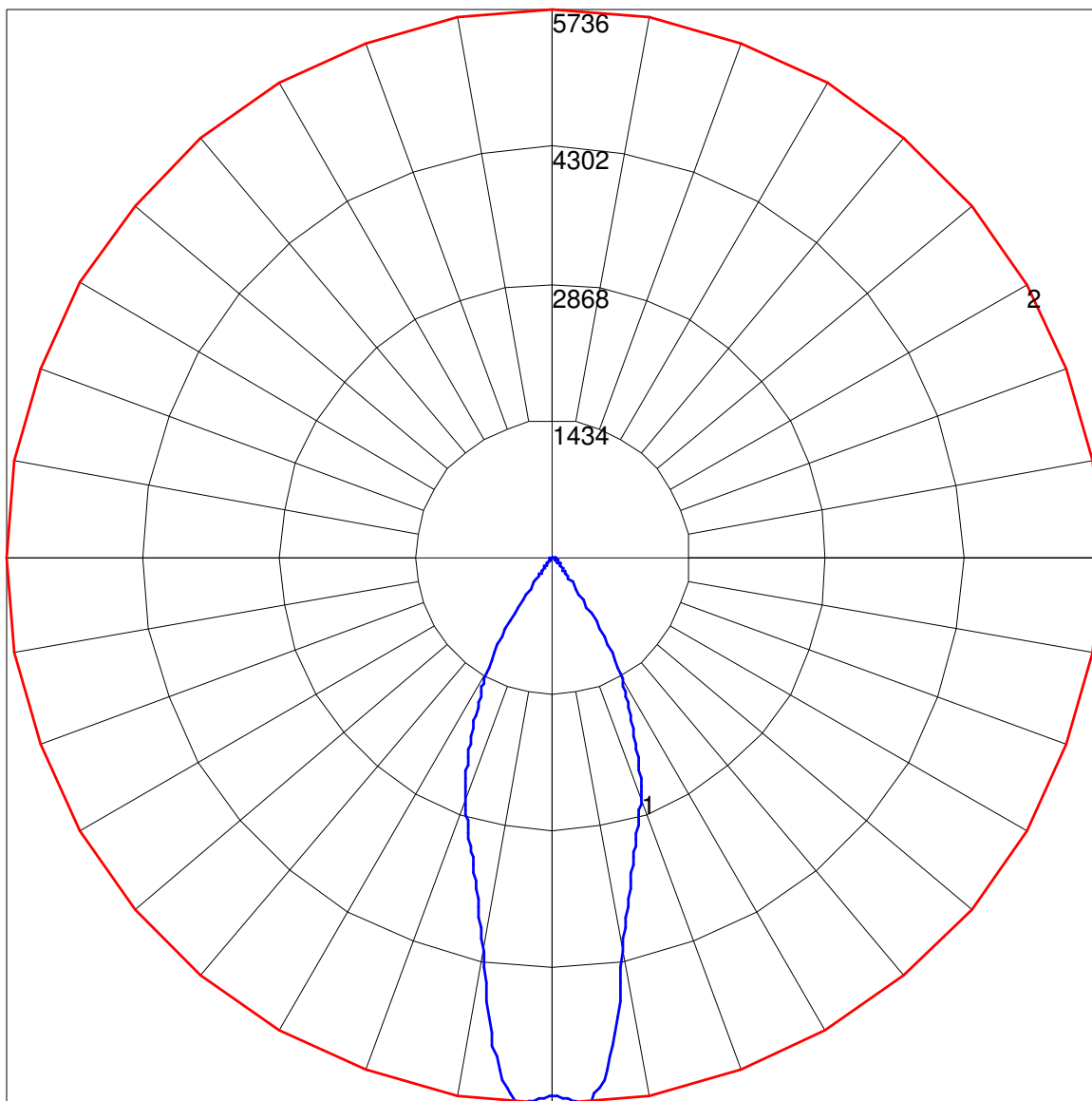
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UGR TABLE - CORRECTED

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	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	3H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	4H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	6H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	8H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	12H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
4H	2H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	3H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	4H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	6H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	8H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	12H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
8H	4H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	6H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	8H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	12H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
12H	4H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	6H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	8H	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6

Maximum UGR = 3.6

POLAR GRAPH



Maximum Candela = 5736.172 Located At Horizontal Angle = 0, Vertical Angle = 3.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (3.5) (Through Max. Cd.)