



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L30-840-DIM1-UNV-RW-OF-CS-IP\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.12

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 03-05-2024

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6DR-TL-L30-840-DIM1-UNV-RW-OF-CS-IP

[LUMINAIRE] Black formed aluminum housing, semi specular reflector, clear glas

[MORE] s patterned lens 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	2138
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	79
Total Luminaire Watts	26.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	0.94
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.48 ft (Diameter)
Luminous Width (90-270)	0.48 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	28869	28869	28869
55	24076	24076	24076
65	16985	16985	16985
75	10405	10405	10405
85	8206	8206	8206

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CANDELA TABULATION

	<u>0</u>
0.0	1581.653
0.5	1580.173
1.0	1578.694
1.5	1577.214
2.0	1574.255
2.5	1569.816
3.0	1565.378
3.5	1559.459
4.0	1553.541
4.5	1549.102
5.0	1543.184
5.5	1537.266
6.0	1531.348
6.5	1525.429
7.0	1519.511
7.5	1513.593
8.0	1506.195
8.5	1500.277
9.0	1494.359
9.5	1486.961
10.0	1481.043
10.5	1473.793
11.0	1466.691
11.5	1459.589
12.0	1452.487
12.5	1445.533
13.0	1438.431
13.5	1431.033
14.0	1423.783
14.5	1416.682
15.0	1410.024
15.5	1403.218
16.0	1396.560
16.5	1390.049
17.0	1383.983
17.5	1377.917
18.0	1371.999
18.5	1366.376
19.0	1360.754
19.5	1354.984
20.0	1349.066
20.5	1342.703
21.0	1335.454
21.5	1327.168
22.0	1317.847
22.5	1307.490
23.0	1296.245
23.5	1283.521
24.0	1269.613
24.5	1254.373
25.0	1237.507
25.5	1219.308
26.0	1199.038
26.5	1176.844

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**CANDELA TABULATION - (Cont.)**

27.0	1153.171
27.5	1127.427
28.0	1100.055
28.5	1070.316
29.0	1038.949
29.5	1004.919
30.0	968.818
30.5	930.645
31.0	890.993
31.5	850.453
32.0	809.173
32.5	768.189
33.0	727.649
33.5	688.441
34.0	650.860
34.5	615.498
35.0	583.244
35.5	553.652
36.0	527.612
36.5	504.531
37.0	484.261
37.5	466.950
38.0	451.711
38.5	438.247
39.0	426.558
39.5	416.201
40.0	406.732
40.5	398.150
41.0	390.161
41.5	382.911
42.0	376.253
42.5	369.891
43.0	363.825
43.5	358.054
44.0	352.580
44.5	347.401
45.0	342.075
45.5	337.044
46.0	331.866
46.5	326.835
47.0	321.657
47.5	316.479
48.0	311.152
48.5	305.826
49.0	300.795
49.5	295.617
50.0	290.142
50.5	284.520
51.0	278.750
51.5	272.979
52.0	267.209
52.5	261.291
53.0	255.521
53.5	249.898
54.0	243.684
54.5	237.470

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CANDELA TABULATION - (Cont.)

55.0	231.404
55.5	225.189
56.0	219.123
56.5	213.057
57.0	206.991
57.5	200.925
58.0	195.154
58.5	189.236
59.0	183.466
59.5	177.843
60.0	172.221
60.5	166.599
61.0	161.124
61.5	155.798
62.0	150.472
62.5	145.293
63.0	140.115
63.5	134.936
64.0	130.054
64.5	125.023
65.0	120.288
65.5	115.406
66.0	110.819
66.5	106.233
67.0	101.794
67.5	97.355
68.0	93.065
68.5	88.774
69.0	84.779
69.5	80.636
70.0	76.789
70.5	72.942
71.0	69.244
71.5	65.693
72.0	62.142
72.5	58.887
73.0	55.780
73.5	52.968
74.0	50.157
74.5	47.642
75.0	45.127
75.5	42.907
76.0	40.688
76.5	38.765
77.0	36.989
77.5	35.214
78.0	33.438
78.5	31.663
79.0	30.035
79.5	28.408
80.0	26.780
80.5	25.153
81.0	23.525
81.5	22.045
82.0	20.418
82.5	18.938

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CANDELA TABULATION - (Cont.)

83.0	17.459
83.5	16.127
84.0	14.648
84.5	13.316
85.0	11.984
85.5	10.653
86.0	9.321
86.5	7.990
87.0	6.806
87.5	5.474
88.0	4.439
88.5	3.551
89.0	2.811
89.5	2.071
90.0	1.480
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
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122.0	0.000
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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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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	543.49	N.A.	25.40
0-30	1098.72	N.A.	51.40
0-40	1482.87	N.A.	69.40
0-60	1954.29	N.A.	91.40
0-80	2124.47	N.A.	99.40
0-90	2138.12	N.A.	100.00
10-90	1992.83	N.A.	93.20
20-40	939.39	N.A.	43.90
20-50	1204.43	N.A.	56.30
40-70	591.53	N.A.	27.70
60-80	170.18	N.A.	8.00
70-80	50.07	N.A.	2.30
80-90	13.65	N.A.	0.60
90-110	0.04	N.A.	0.00
90-120	0.04	N.A.	0.00
90-130	0.04	N.A.	0.00
90-150	0.04	N.A.	0.00
90-180	0.04	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	2138.16	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	145.29
10-20	398.20
20-30	555.24
30-40	384.15
40-50	265.04
50-60	206.38
60-70	120.11
70-80	50.07
80-90	13.65
90-100	0.04
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38

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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

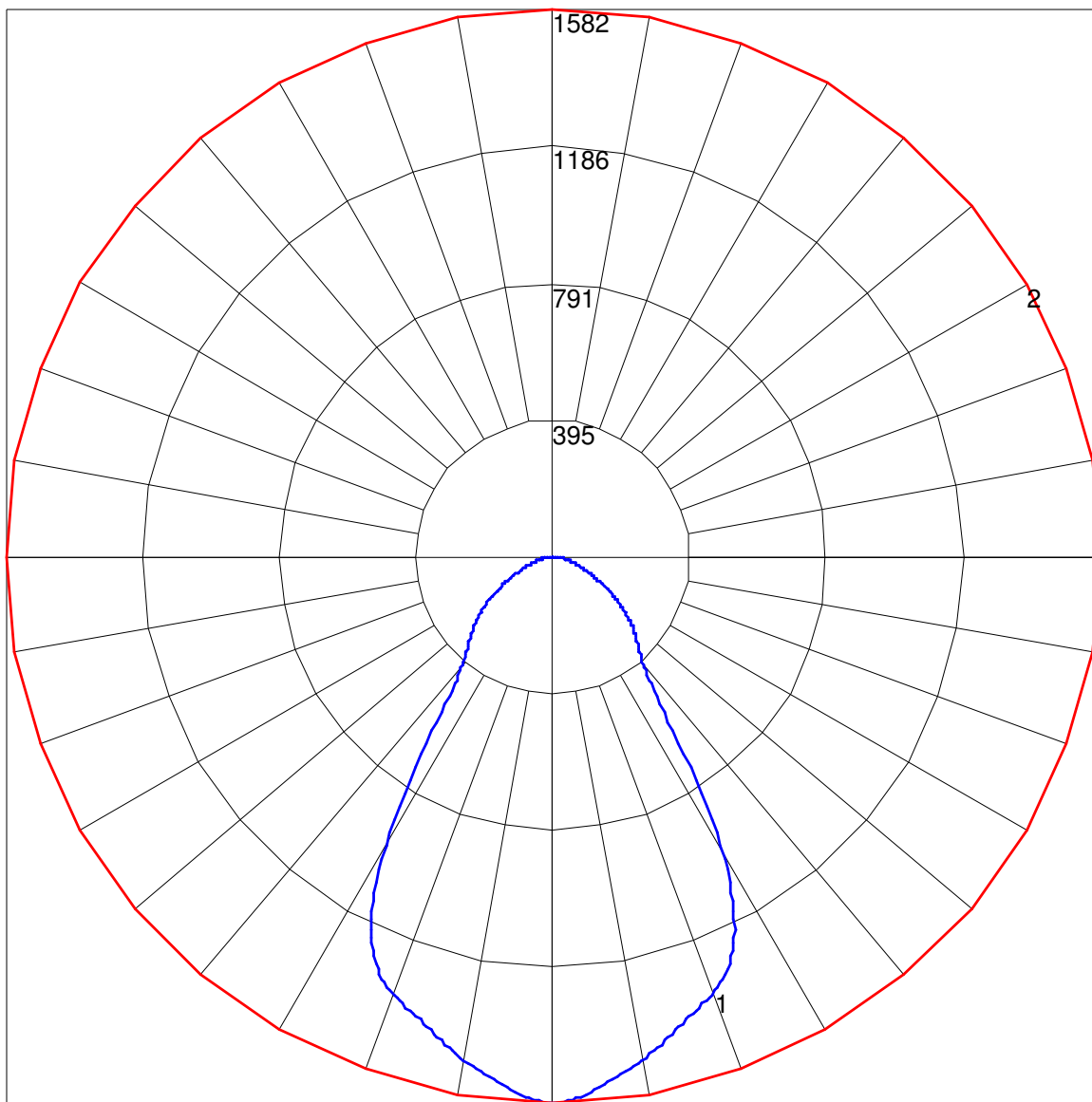
X=2H	Y=2H	20.6	21.9	20.9	22.2	22.5	20.6	21.9	20.9	22.2	22.5
	3H	21.5	22.7	21.9	23.0	23.4	21.5	22.7	21.9	23.0	23.4
	4H	21.8	22.9	22.2	23.2	23.6	21.8	22.9	22.2	23.2	23.6
	6H	21.9	23.0	22.4	23.3	23.7	21.9	23.0	22.4	23.3	23.7
	8H	22.0	23.0	22.4	23.4	23.8	22.0	23.0	22.4	23.4	23.8
	12H	22.0	22.9	22.5	23.3	23.8	22.0	22.9	22.5	23.3	23.8

### UGR Viewed Endwise

4H	2H	20.9	22.0	21.3	22.3	22.7	20.9	22.0	21.3	22.3	22.7
	3H	22.0	22.9	22.4	23.3	23.7	22.0	22.9	22.4	23.3	23.7
	4H	22.4	23.2	22.8	23.6	24.0	22.4	23.2	22.8	23.6	24.0
	6H	22.6	23.3	23.1	23.8	24.2	22.6	23.3	23.1	23.8	24.2
	8H	22.7	23.3	23.2	23.8	24.3	22.7	23.3	23.2	23.8	24.3
	12H	22.8	23.3	23.2	23.8	24.3	22.8	23.3	23.2	23.8	24.3
8H	4H	22.4	23.1	22.9	23.5	24.0	22.4	23.1	22.9	23.5	24.0
	6H	22.8	23.3	23.3	23.8	24.3	22.8	23.3	23.3	23.8	24.3
	8H	22.9	23.4	23.4	23.9	24.4	22.9	23.4	23.4	23.9	24.4
	12H	23.0	23.4	23.5	23.9	24.5	23.0	23.4	23.5	23.9	24.5
12H	4H	22.4	23.0	22.9	23.5	24.0	22.4	23.0	22.9	23.5	24.0
	6H	22.8	23.3	23.3	23.7	24.3	22.8	23.3	23.3	23.7	24.3
	8H	22.9	23.4	23.5	23.9	24.4	22.9	23.4	23.5	23.9	24.4

Maximum UGR = 24.5

POLAR GRAPH



Maximum Candela = 1581.653 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.)