



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L30-840-DIM-UNV-LW-OF-WH\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM 12326812.07  
 [TESTLAB] UL Verification Services Inc.  
 [ISSUEDATE] 05/28/2021  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
 [LUMCAT] 6DR-TL-L30-840-DIM-UNV-LW-OF-WH  
 [LUMINAIRE] Black formed aluminum housing, white 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	2357
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	26.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.08
Spacing Criterion (90-270)	1.08
Spacing Criterion (Diagonal)	0.98
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.46 ft (Diameter)
Luminous Width (90-270)	0.46 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	39186	39186	39186
55	32624	32624	32624
65	24785	24785	24785
75	17974	17974	17974
85	11713	11713	11713

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CANDELA TABULATION

	<u>0</u>
0.0	1499.489
0.5	1499.187
1.0	1497.979
1.5	1496.168
2.0	1493.903
2.5	1490.884
3.0	1487.865
3.5	1484.393
4.0	1481.222
4.5	1478.052
5.0	1475.788
5.5	1473.674
6.0	1471.712
6.5	1469.750
7.0	1467.636
7.5	1465.674
8.0	1463.711
8.5	1461.900
9.0	1460.088
9.5	1458.578
10.0	1457.069
10.5	1455.861
11.0	1454.804
11.5	1454.201
12.0	1453.144
12.5	1452.087
13.0	1450.578
13.5	1448.615
14.0	1446.200
14.5	1443.482
15.0	1440.614
15.5	1436.991
16.0	1433.066
16.5	1429.141
17.0	1425.216
17.5	1421.140
18.0	1416.762
18.5	1411.781
19.0	1406.195
19.5	1400.006
20.0	1392.911
20.5	1385.212
21.0	1375.701
21.5	1364.379
22.0	1351.548
22.5	1337.055
23.0	1321.205
23.5	1303.995
24.0	1284.974
24.5	1264.443
25.0	1242.252
25.5	1219.155
26.0	1194.549
26.5	1168.886

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**CANDELA TABULATION - (Cont.)**

27.0	1141.562
27.5	1113.483
28.0	1083.895
28.5	1052.646
29.0	1020.190
29.5	986.073
30.0	951.050
30.5	914.970
31.0	878.891
31.5	842.509
32.0	807.185
32.5	773.370
33.0	740.913
33.5	710.570
34.0	682.642
34.5	657.281
35.0	634.637
35.5	613.805
36.0	595.538
36.5	578.782
37.0	563.837
37.5	550.401
38.0	538.173
38.5	527.002
39.0	516.435
39.5	506.925
40.0	497.716
40.5	489.111
41.0	481.110
41.5	473.261
42.0	465.713
42.5	458.768
43.0	451.673
43.5	444.729
44.0	437.936
44.5	431.294
45.0	424.500
45.5	418.009
46.0	411.367
46.5	404.725
47.0	397.931
47.5	391.289
48.0	384.496
48.5	377.703
49.0	370.909
49.5	363.814
50.0	357.021
50.5	350.077
51.0	343.133
51.5	336.038
52.0	328.942
52.5	321.847
53.0	314.752
53.5	307.657
54.0	300.864
54.5	293.920

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**CANDELA TABULATION - (Cont.)**

55.0	286.674
55.5	279.578
56.0	272.483
56.5	265.841
57.0	259.199
57.5	252.255
58.0	245.310
58.5	238.517
59.0	231.875
59.5	225.233
60.0	218.892
60.5	212.552
61.0	206.363
61.5	200.173
62.0	194.286
62.5	188.398
63.0	182.662
63.5	176.925
64.0	171.340
64.5	165.905
65.0	160.471
65.5	155.187
66.0	149.919
66.5	144.741
67.0	139.623
67.5	134.611
68.0	129.690
68.5	124.754
69.0	119.968
69.5	115.228
70.0	110.624
70.5	106.170
71.0	101.808
71.5	97.581
72.0	93.505
72.5	89.550
73.0	85.700
73.5	81.926
74.0	78.303
74.5	74.756
75.0	71.268
75.5	67.902
76.0	64.596
76.5	61.350
77.0	58.195
77.5	55.101
78.0	52.096
78.5	49.153
79.0	46.269
79.5	43.492
80.0	40.729
80.5	38.057
81.0	35.415
81.5	32.789
82.0	30.222
82.5	27.671

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CANDELA TABULATION - (Cont.)

83.0	25.180
83.5	22.735
84.0	20.319
84.5	17.949
85.0	15.639
85.5	13.405
86.0	11.247
86.5	9.163
87.0	7.140
87.5	5.450
88.0	4.167
88.5	3.049
89.0	2.113
89.5	1.328
90.0	0.845
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
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125.5	0.000
126.0	0.000
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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	546.22	N.A.	23.20
0-30	1104.12	N.A.	46.80
0-40	1517.82	N.A.	64.40
0-60	2101.94	N.A.	89.20
0-80	2338.54	N.A.	99.20
0-90	2357.24	N.A.	100.00
10-90	2216.92	N.A.	94.00
20-40	971.60	N.A.	41.20
20-50	1299.41	N.A.	55.10
40-70	744.08	N.A.	31.60
60-80	236.60	N.A.	10.00
70-80	76.64	N.A.	3.30
80-90	18.70	N.A.	0.80
90-110	0.02	N.A.	0.00
90-120	0.02	N.A.	0.00
90-130	0.02	N.A.	0.00
90-150	0.02	N.A.	0.00
90-180	0.02	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	2357.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	140.32
10-20	405.89
20-30	557.91
30-40	413.69
40-50	327.81
50-60	256.31
60-70	159.96
70-80	76.64
80-90	18.70
90-100	0.02
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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	96	87	80	75	93	85	79	74	83	77	73	80	75	72	78	74	70	69
4	89	79	72	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50
7	73	61	53	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38
10	61	49	42	37	60	49	42	37	48	42	37	47	41	37	46	41	37	35

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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	22.0	23.4	22.4	23.7	24.0	22.0	23.4	22.4	23.7	24.0
	3H	23.2	24.5	23.6	24.8	25.1	23.2	24.5	23.6	24.8	25.1
	4H	23.6	24.8	24.0	25.1	25.5	23.6	24.8	24.0	25.1	25.5
	6H	23.9	24.9	24.3	25.3	25.7	23.9	24.9	24.3	25.3	25.7
	8H	24.0	25.0	24.4	25.4	25.8	24.0	25.0	24.4	25.4	25.8
	12H	24.0	25.0	24.4	25.3	25.8	24.0	25.0	24.4	25.3	25.8

UGR Viewed Endwise

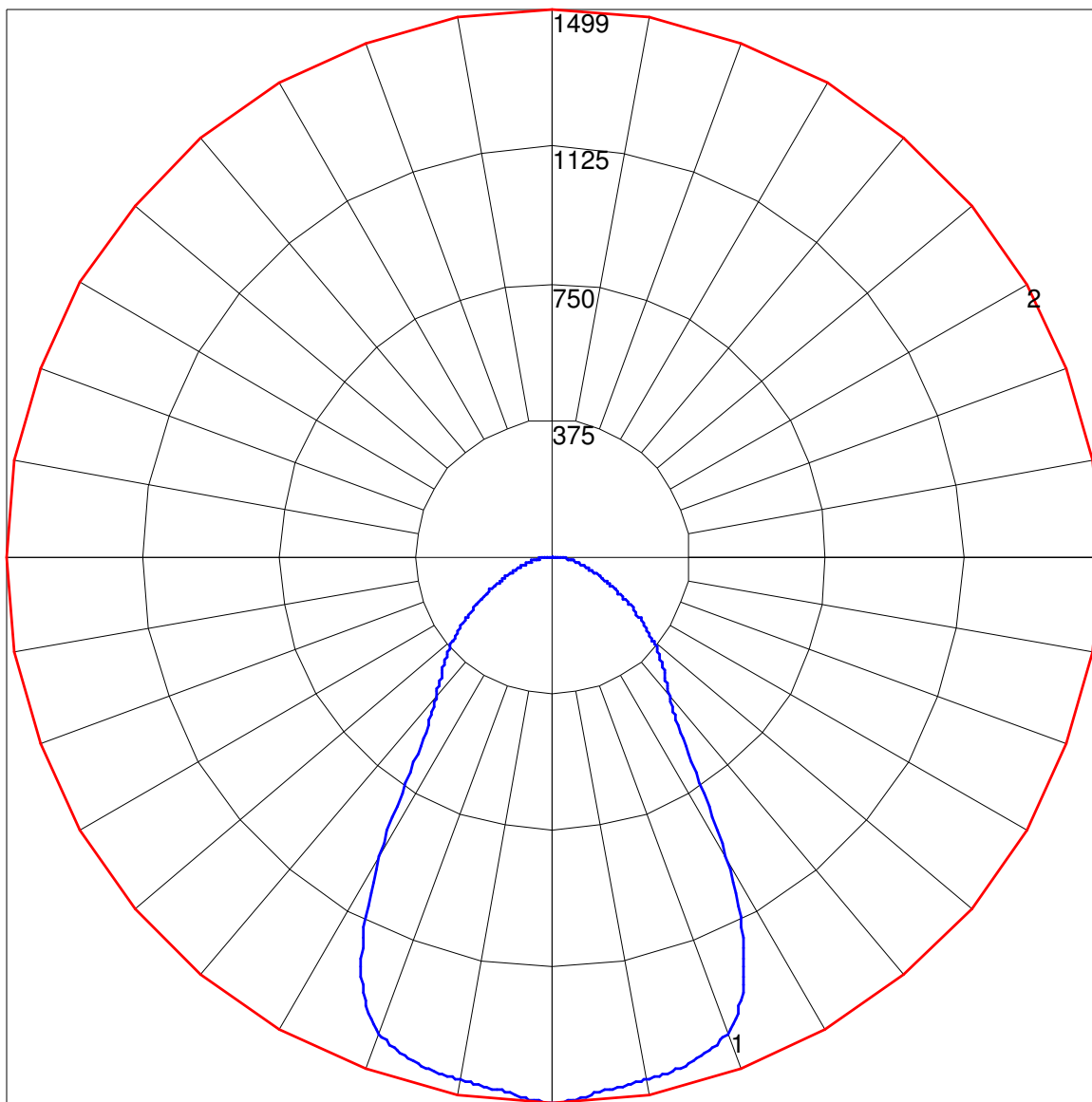
4H	2H	22.4	23.6	22.8	23.9	24.3	22.4	23.6	22.8	23.9	24.3
	3H	23.8	24.8	24.2	25.2	25.6	23.8	24.8	24.2	25.2	25.6
	4H	24.3	25.2	24.8	25.6	26.0	24.3	25.2	24.8	25.6	26.0
	6H	24.7	25.4	25.2	25.9	26.3	24.7	25.4	25.2	25.9	26.3
	8H	24.8	25.5	25.2	25.9	26.4	24.8	25.5	25.2	25.9	26.4
	12H	24.9	25.5	25.3	26.0	26.4	24.9	25.5	25.3	26.0	26.4

8H	4H	24.5	25.2	24.9	25.6	26.1	24.5	25.2	24.9	25.6	26.1
	6H	24.9	25.5	25.4	26.0	26.5	24.9	25.5	25.4	26.0	26.5
	8H	25.1	25.6	25.6	26.1	26.6	25.1	25.6	25.6	26.1	26.6
	12H	25.2	25.7	25.7	26.2	26.7	25.2	25.7	25.7	26.2	26.7

12H	4H	24.5	25.1	25.0	25.6	26.0	24.5	25.1	25.0	25.6	26.0
	6H	25.0	25.5	25.5	25.9	26.5	25.0	25.5	25.5	25.9	26.5
	8H	25.2	25.6	25.7	26.1	26.7	25.2	25.6	25.7	26.1	26.7

Maximum UGR = 26.7

POLAR GRAPH



Maximum Candela = 1499.489 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.)