



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L50-840-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] 11/16/2022

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6DR-TL-L50-840-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	3862
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	43.9
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	64197	64197	64197
55	53447	53447	53447
65	40604	40604	40604
75	29446	29446	29446
85	19189	19189	19189

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CANDELA TABULATION

	<u>0</u>
0.0	2456.541
0.5	2456.046
1.0	2454.068
1.5	2451.100
2.0	2447.391
2.5	2442.444
3.0	2437.498
3.5	2431.810
4.0	2426.616
4.5	2421.423
5.0	2417.713
5.5	2414.251
6.0	2411.036
6.5	2407.821
7.0	2404.358
7.5	2401.143
8.0	2397.928
8.5	2394.961
9.0	2391.993
9.5	2389.520
10.0	2387.047
10.5	2385.068
11.0	2383.337
11.5	2382.348
12.0	2380.617
12.5	2378.885
13.0	2376.412
13.5	2373.197
14.0	2369.240
14.5	2364.789
15.0	2360.090
15.5	2354.154
16.0	2347.724
16.5	2341.294
17.0	2334.864
17.5	2328.187
18.0	2321.015
18.5	2312.853
19.0	2303.703
19.5	2293.563
20.0	2281.939
20.5	2269.327
21.0	2253.746
21.5	2235.198
22.0	2214.176
22.5	2190.434
23.0	2164.467
23.5	2136.273
24.0	2105.112
24.5	2071.478
25.0	2035.123
25.5	1997.284
26.0	1956.973
26.5	1914.930

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CANDELA TABULATION - (Cont.)

27.0	1870.166
27.5	1824.167
28.0	1775.694
28.5	1724.500
29.0	1671.328
29.5	1615.436
30.0	1558.060
30.5	1498.953
31.0	1439.845
31.5	1380.243
32.0	1322.372
32.5	1266.975
33.0	1213.803
33.5	1164.093
34.0	1118.341
34.5	1076.792
35.0	1039.696
35.5	1005.567
36.0	975.642
36.5	948.191
37.0	923.707
37.5	901.696
38.0	881.664
38.5	863.363
39.0	846.051
39.5	830.471
40.0	815.385
40.5	801.288
41.0	788.180
41.5	775.320
42.0	762.955
42.5	751.578
43.0	739.955
43.5	728.578
44.0	717.449
44.5	706.568
45.0	695.439
45.5	684.804
46.0	673.923
46.5	663.041
47.0	651.912
47.5	641.030
48.0	629.901
48.5	618.772
49.0	607.643
49.5	596.020
50.0	584.891
50.5	573.514
51.0	562.138
51.5	550.514
52.0	538.891
52.5	527.267
53.0	515.644
53.5	504.020
54.0	492.891
54.5	481.515

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CANDELA TABULATION - (Cont.)

55.0	469.644
55.5	458.020
56.0	446.397
56.5	435.515
57.0	424.633
57.5	413.257
58.0	401.881
58.5	390.752
59.0	379.870
59.5	368.988
60.0	358.601
60.5	348.214
61.0	338.074
61.5	327.935
62.0	318.289
62.5	308.644
63.0	299.246
63.5	289.849
64.0	280.698
64.5	271.795
65.0	262.892
65.5	254.236
66.0	245.605
66.5	237.122
67.0	228.738
67.5	220.527
68.0	212.465
68.5	204.378
69.0	196.538
69.5	188.773
70.0	181.230
70.5	173.934
71.0	166.787
71.5	159.862
72.0	153.184
72.5	146.705
73.0	140.399
73.5	134.216
74.0	128.280
74.5	122.468
75.0	116.756
75.5	111.241
76.0	105.824
76.5	100.507
77.0	95.338
77.5	90.269
78.0	85.347
78.5	80.524
79.0	75.801
79.5	71.250
80.0	66.725
80.5	62.347
81.0	58.019
81.5	53.716
82.0	49.512
82.5	45.332

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CANDELA TABULATION - (Cont.)

83.0	41.251
83.5	37.245
84.0	33.288
84.5	29.405
85.0	25.621
85.5	21.961
86.0	18.425
86.5	15.012
87.0	11.698
87.5	8.928
88.0	6.826
88.5	4.996
89.0	3.462
89.5	2.176
90.0	1.385
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
121.5	0.000
122.0	0.000
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123.0	0.000
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124.0	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

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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
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158.0	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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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	894.84	N.A.	23.20
0-30	1808.83	N.A.	46.80
0-40	2486.57	N.A.	64.40
0-60	3443.52	N.A.	89.20
0-80	3831.13	N.A.	99.20
0-90	3861.76	N.A.	100.00
10-90	3631.88	N.A.	94.00
20-40	1591.73	N.A.	41.20
20-50	2128.77	N.A.	55.10
40-70	1219.00	N.A.	31.60
60-80	387.61	N.A.	10.00
70-80	125.56	N.A.	3.30
80-90	30.63	N.A.	0.80
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	3861.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	229.88
10-20	664.96
20-30	913.99
30-40	677.73
40-50	537.04
50-60	419.91
60-70	262.05
70-80	125.56
80-90	30.63
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	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	51	50
7	73	61	53	48	71	60	53	48	59	52	48	57	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

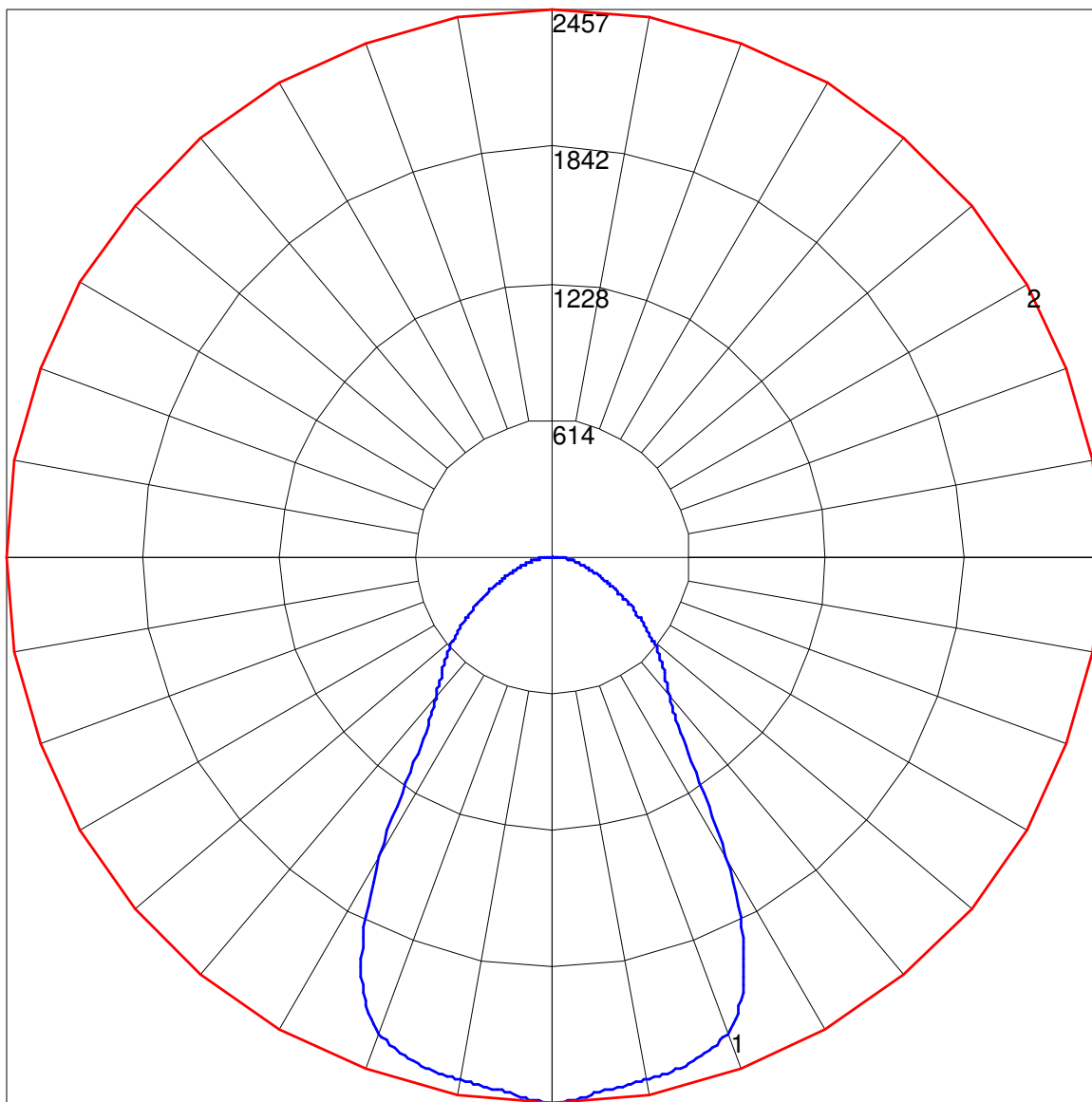
X=2H	Y=2H	23.7	25.1	24.1	25.4	25.7	23.7	25.1	24.1	25.4	25.7
	3H	24.9	26.2	25.3	26.5	26.8	24.9	26.2	25.3	26.5	26.8
	4H	25.3	26.5	25.7	26.8	27.2	25.3	26.5	25.7	26.8	27.2
	6H	25.6	26.6	26.0	27.0	27.4	25.6	26.6	26.0	27.0	27.4
	8H	25.7	26.7	26.1	27.1	27.5	25.7	26.7	26.1	27.1	27.5
	12H	25.7	26.7	26.1	27.0	27.5	25.7	26.7	26.1	27.0	27.5

UGR Viewed Endwise

4H	2H	24.1	25.3	24.5	25.6	26.0	24.1	25.3	24.5	25.6	26.0
	3H	25.5	26.5	25.9	26.9	27.3	25.5	26.5	25.9	26.9	27.3
	4H	26.0	26.9	26.5	27.3	27.7	26.0	26.9	26.5	27.3	27.7
	6H	26.4	27.1	26.9	27.6	28.0	26.4	27.1	26.9	27.6	28.0
	8H	26.5	27.2	26.9	27.6	28.1	26.5	27.2	26.9	27.6	28.1
	12H	26.6	27.2	27.0	27.7	28.1	26.6	27.2	27.0	27.7	28.1
8H	4H	26.2	26.9	26.6	27.3	27.8	26.2	26.9	26.6	27.3	27.8
	6H	26.6	27.2	27.1	27.7	28.2	26.6	27.2	27.1	27.7	28.2
	8H	26.8	27.3	27.3	27.8	28.3	26.8	27.3	27.3	27.8	28.3
	12H	26.9	27.4	27.4	27.9	28.4	26.9	27.4	27.4	27.9	28.4
12H	4H	26.2	26.8	26.7	27.3	27.7	26.2	26.8	26.7	27.3	27.7
	6H	26.7	27.2	27.2	27.6	28.2	26.7	27.2	27.2	27.6	28.2
	8H	26.9	27.3	27.4	27.8	28.4	26.9	27.3	27.4	27.8	28.4

Maximum UGR = 28.4

POLAR GRAPH



Maximum Candela = 2456.541 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.)