



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L50-940-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-L50-940-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	3212
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	73
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	53395	53395	53395
55	44453	44453	44453
65	33772	33772	33772
75	24491	24491	24491
85	15960	15960	15960

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CANDELA TABULATION

	<u>0</u>
0.0	2043.196
0.5	2042.785
1.0	2041.139
1.5	2038.671
2.0	2035.585
2.5	2031.471
3.0	2027.358
3.5	2022.626
4.0	2018.307
4.5	2013.987
5.0	2010.902
5.5	2008.022
6.0	2005.348
6.5	2002.674
7.0	1999.794
7.5	1997.120
8.0	1994.446
8.5	1991.977
9.0	1989.509
9.5	1987.452
10.0	1985.395
10.5	1983.750
11.0	1982.310
11.5	1981.487
12.0	1980.047
12.5	1978.607
13.0	1976.550
13.5	1973.876
14.0	1970.585
14.5	1966.882
15.0	1962.974
15.5	1958.037
16.0	1952.689
16.5	1947.341
17.0	1941.993
17.5	1936.439
18.0	1930.474
18.5	1923.686
19.0	1916.075
19.5	1907.641
20.0	1897.974
20.5	1887.483
21.0	1874.524
21.5	1859.097
22.0	1841.612
22.5	1821.865
23.0	1800.267
23.5	1776.818
24.0	1750.900
24.5	1722.925
25.0	1692.687
25.5	1661.215
26.0	1627.687
26.5	1592.718

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CANDELA TABULATION - (Cont.)

27.0	1555.487
27.5	1517.227
28.0	1476.910
28.5	1434.331
29.0	1390.106
29.5	1343.618
30.0	1295.896
30.5	1246.734
31.0	1197.573
31.5	1147.999
32.0	1099.866
32.5	1053.790
33.0	1009.565
33.5	968.220
34.0	930.165
34.5	895.608
35.0	864.754
35.5	836.367
36.0	811.478
36.5	788.645
37.0	768.281
37.5	749.974
38.0	733.313
38.5	718.091
39.0	703.692
39.5	690.733
40.0	678.186
40.5	666.461
41.0	655.559
41.5	644.863
42.0	634.578
42.5	625.116
43.0	615.448
43.5	605.986
44.0	596.729
44.5	587.679
45.0	578.422
45.5	569.577
46.0	560.527
46.5	551.476
47.0	542.219
47.5	533.169
48.0	523.912
48.5	514.656
49.0	505.399
49.5	495.732
50.0	486.475
50.5	477.013
51.0	467.551
51.5	457.883
52.0	448.216
52.5	438.548
53.0	428.880
53.5	419.212
54.0	409.956
54.5	400.494

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CANDELA TABULATION - (Cont.)

55.0	390.620
55.5	380.952
56.0	371.285
56.5	362.234
57.0	353.183
57.5	343.721
58.0	334.259
58.5	325.003
59.0	315.952
59.5	306.901
60.0	298.262
60.5	289.623
61.0	281.189
61.5	272.755
62.0	264.733
62.5	256.711
63.0	248.894
63.5	241.078
64.0	233.467
64.5	226.062
65.0	218.657
65.5	211.457
66.0	204.278
66.5	197.223
67.0	190.250
67.5	183.421
68.0	176.715
68.5	169.989
69.0	163.468
69.5	157.009
70.0	150.735
70.5	144.667
71.0	138.723
71.5	132.963
72.0	127.409
72.5	122.020
73.0	116.775
73.5	111.632
74.0	106.695
74.5	101.862
75.0	97.110
75.5	92.523
76.0	88.018
76.5	83.596
77.0	79.297
77.5	75.080
78.0	70.986
78.5	66.975
79.0	63.046
79.5	59.262
80.0	55.497
80.5	51.856
81.0	48.257
81.5	44.678
82.0	41.181
82.5	37.704

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CANDELA TABULATION - (Cont.)

83.0	34.310
83.5	30.978
84.0	27.687
84.5	24.457
85.0	21.310
85.5	18.266
86.0	15.324
86.5	12.486
87.0	9.730
87.5	7.426
88.0	5.677
88.5	4.155
89.0	2.880
89.5	1.810
90.0	1.152
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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123.0	0.000
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125.5	0.000
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130.0	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	744.27	N.A.	23.20
0-30	1504.47	N.A.	46.80
0-40	2068.17	N.A.	64.40
0-60	2864.1	N.A.	89.20
0-80	3186.49	N.A.	99.20
0-90	3211.97	N.A.	100.00
10-90	3020.77	N.A.	94.00
20-40	1323.9	N.A.	41.20
20-50	1770.58	N.A.	55.10
40-70	1013.89	N.A.	31.60
60-80	322.39	N.A.	10.00
70-80	104.44	N.A.	3.30
80-90	25.48	N.A.	0.80
90-110	0.03	N.A.	0.00
90-120	0.03	N.A.	0.00
90-130	0.03	N.A.	0.00
90-150	0.03	N.A.	0.00
90-180	0.03	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3212.00	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	191.20
10-20	553.07
20-30	760.20
30-40	563.70
40-50	446.68
50-60	349.25
60-70	217.96
70-80	104.44
80-90	25.48
90-100	0.03
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	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

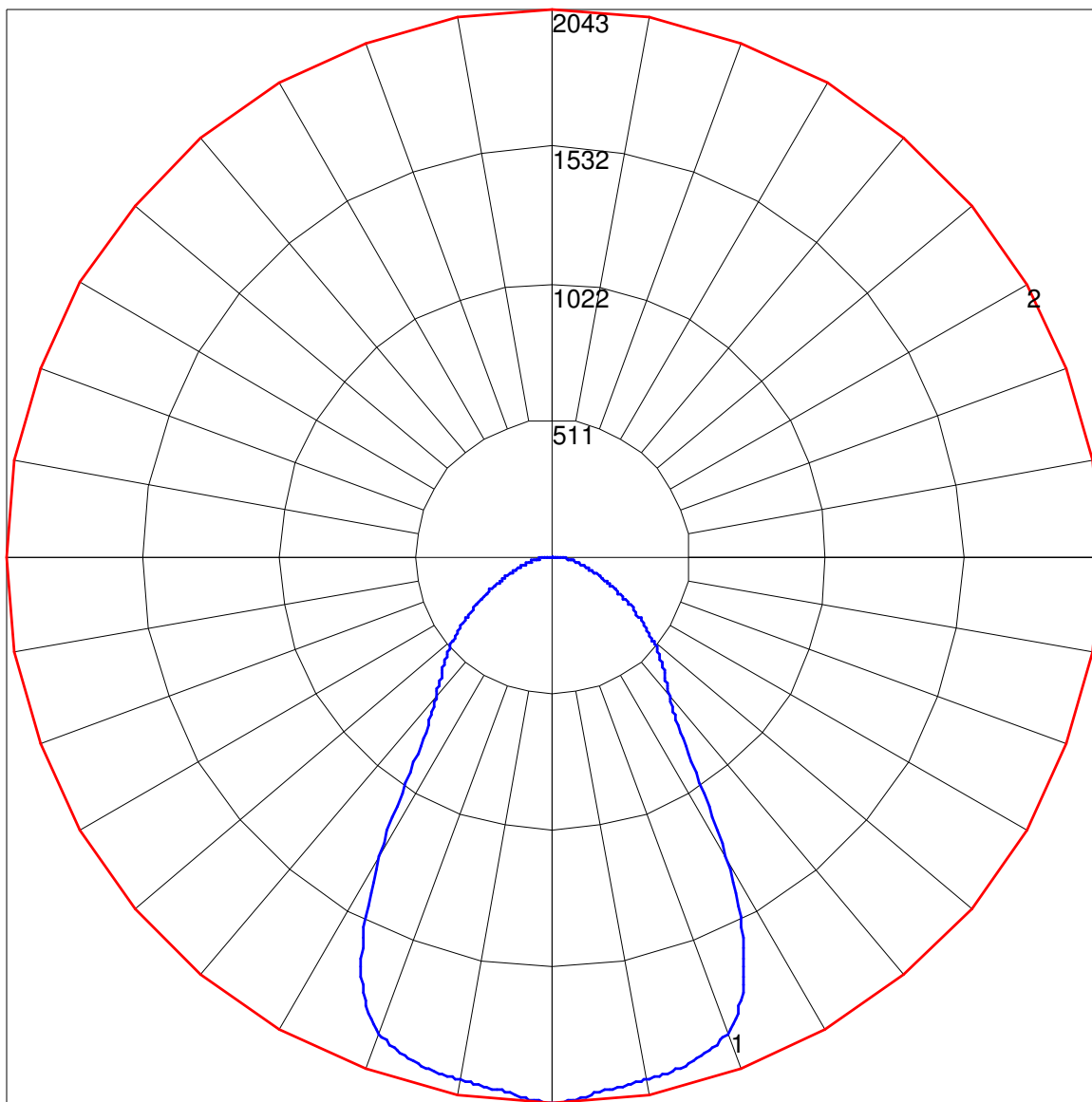
X=2H	Y=2H	23.1	24.5	23.5	24.8	25.1	23.1	24.5	23.5	24.8	25.1
	3H	24.3	25.6	24.7	25.9	26.2	24.3	25.6	24.7	25.9	26.2
	4H	24.7	25.9	25.1	26.2	26.6	24.7	25.9	25.1	26.2	26.6
	6H	25.0	26.0	25.4	26.4	26.8	25.0	26.0	25.4	26.4	26.8
	8H	25.0	26.1	25.5	26.5	26.9	25.0	26.1	25.5	26.5	26.9
	12H	25.1	26.1	25.5	26.4	26.9	25.1	26.1	25.5	26.4	26.9

UGR Viewed Endwise

4H	2H	23.5	24.7	23.9	25.0	25.4	23.5	24.7	23.9	25.0	25.4
	3H	24.9	25.9	25.3	26.3	26.7	24.9	25.9	25.3	26.3	26.7
	4H	25.4	26.3	25.9	26.7	27.1	25.4	26.3	25.9	26.7	27.1
	6H	25.8	26.5	26.3	27.0	27.4	25.8	26.5	26.3	27.0	27.4
	8H	25.9	26.6	26.3	27.0	27.5	25.9	26.6	26.3	27.0	27.5
	12H	26.0	26.6	26.4	27.1	27.5	26.0	26.6	26.4	27.1	27.5
8H	4H	25.6	26.3	26.0	26.7	27.2	25.6	26.3	26.0	26.7	27.2
	6H	26.0	26.6	26.5	27.1	27.6	26.0	26.6	26.5	27.1	27.6
	8H	26.2	26.7	26.7	27.2	27.7	26.2	26.7	26.7	27.2	27.7
	12H	26.3	26.8	26.8	27.3	27.8	26.3	26.8	26.8	27.3	27.8
12H	4H	25.6	26.2	26.1	26.7	27.1	25.6	26.2	26.1	26.7	27.1
	6H	26.1	26.6	26.6	27.0	27.6	26.1	26.6	26.6	27.0	27.6
	8H	26.3	26.7	26.8	27.2	27.8	26.3	26.7	26.8	27.2	27.8

Maximum UGR = 27.8

POLAR GRAPH



Maximum Candela = 2043.196 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.)