IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L50-8TW-DIM-UNV-SW-OF-WH_2700K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from UL #12316380.11
[TESTLAB] UL Verification Services Inc.
[ISSUEDATE] 2026-10-14
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] 4DR-TL-L50-8TW-DIM-UNV-SW-OF-WH_2700K_
[LUMINAIRE] Black formed aluminum housing, white reflector, frosted plastic
[MORE] lens enclosure
[LAMP] One LED
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Corridor, Hotel, Office, Downlight
[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2616
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	62
Total Luminaire Watts	42.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.35 ft (Diameter)
Luminous Width (90-270)	0.35 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	94465	94465	94465
55	80630	80630	80630
65	68775	68775	68775
75	56871	56871	56871
85	35195	35195	35195

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CANDELA TABULATION

	0
0.0	1101.374
0.5	1101.177
1.0	1100.588
1.5	1099.999
2.0	1098.822
2.5	1097.644
3.0	1096.073
3.5	1094.502
4.0	1092.932
4.5	1091.361
5.0	1089.987
5.5	1088.416
6.0	1086.846
6.5	1085.275
7.0	1083.508
7.5	1081.545
8.0	1079.582
8.5	1077.619
9.0	1075.459
9.5	1073.299
10.0	1070.944
10.5	1068.588
11.0	1066.036
11.5	1063.287
12.0	1060.538
12.5	1057.594
13.0	1054.452
13.5	1051.115
14.0	1047.581
14.5	1043.851
15.0	1039.925
15.5	1035.998
16.0	1031.875
16.5	1027.949
17.0	1023.630
17.5	1019.311
18.0	1014.991
18.5	1010.672
19.0	1006.353
19.5	1002.034
20.0	997.715
20.5	993.396
21.0	988.880
21.5	984.169
22.0	979.261
22.5	973.764
23.0	968.267
23.5	962.180
24.0	956.094
24.5	949.616
25.0	942.941
25.5	936.266
26.0	929.198
26.5	922.131

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CANDELA TABULATION - (Cont.)

27.0	914.867
27.5	907.406
28.0	899.946
28.5	892.682
29.0	885.418
29.5	877.958
30.0	870.694
30.5	863.037
31.0	855.184
31.5	847.528
32.0	839.675
32.5	831.822
33.0	823.773
33.5	815.527
34.0	807.478
34.5	799.232
35.0	790.987
35.5	782.545
36.0	774.103
36.5	765.465
37.0	756.826
37.5	748.188
38.0	739.354
38.5	730.323
39.0	721.684
39.5	712.654
40.0	703.623
40.5	694.788
41.0	685.561
41.5	676.726
42.0	667.499
42.5	658.468
43.0	649.241
43.5	639.818
44.0	630.394
44.5	620.971
45.0	611.351
45.5	601.927
46.0	592.307
46.5	582.688
47.0	573.068
47.5	563.252
48.0	553.632
48.5	543.816
49.0	534.196
49.5	524.576
50.0	514.956
50.5	505.532
51.0	496.109
51.5	486.685
52.0	477.458
52.5	468.231
53.0	459.200
53.5	450.169
54.0	441.138
54.5	432.304

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CANDELA TABULATION - (Cont.)

55.0	423.273
55.5	414.438
56.0	406.389
56.5	397.751
57.0	389.505
57.5	381.260
58.0	373.014
58.5	364.769
59.0	356.916
59.5	349.063
60.0	341.210
60.5	333.750
61.0	326.093
61.5	318.240
62.0	310.583
62.5	302.927
63.0	295.467
63.5	288.006
64.0	280.546
64.5	273.282
65.0	266.018
65.5	258.754
66.0	251.490
66.5	244.423
67.0	237.551
67.5	230.680
68.0	223.809
68.5	217.134
69.0	210.459
69.5	203.784
70.0	197.109
70.5	190.630
71.0	184.191
71.5	177.790
72.0	171.469
72.5	165.245
73.0	159.042
73.5	152.897
74.0	146.811
74.5	140.725
75.0	134.717
75.5	128.788
76.0	122.859
76.5	116.989
77.0	111.198
77.5	105.426
78.0	99.732
78.5	94.137
79.0	88.581
79.5	83.084
80.0	77.724
80.5	72.443
81.0	67.221
81.5	62.038
82.0	56.953
82.5	51.947

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CANDELA TABULATION - (Cont.)

83.0	47.000
83.5	42.111
84.0	37.341
84.5	32.649
85.0	28.074
85.5	23.696
86.0	19.613
86.5	16.040
87.0	12.781
87.5	9.855
88.0	7.342
88.5	5.360
89.0	3.730
89.5	2.415
90.0	1.492
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
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118.5	0.000
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119.5	0.000
120.0	0.000
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123.5	0.000
124.0	0.000
124.5	0.000
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125.5	0.000
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126.5	0.000
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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
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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	396.55	N.A.	15.20
0-30	829.74	N.A.	31.70
0-40	1323.61	N.A.	50.60
0-60	2174.18	N.A.	83.10
0-80	2581.29	N.A.	98.70
0-90	2615.99	N.A.	100.00
10-90	2512.53	N.A.	96.00
20-40	927.06	N.A.	35.40
20-50	1397.87	N.A.	53.40
40-70	1114.73	N.A.	42.60
60-80	407.11	N.A.	15.60
70-80	142.95	N.A.	5.50
80-90	34.70	N.A.	1.30
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	2616.03	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	103.46
10-20	293.09
20-30	433.19
30-40	493.87
40-50	470.81
50-60	379.76
60-70	264.16
70-80	142.95
80-90	34.70
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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53
5	78	66	57	51	76	65	56	50	62	55	50	60	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	35	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

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UGR TABLE - CORRECTED

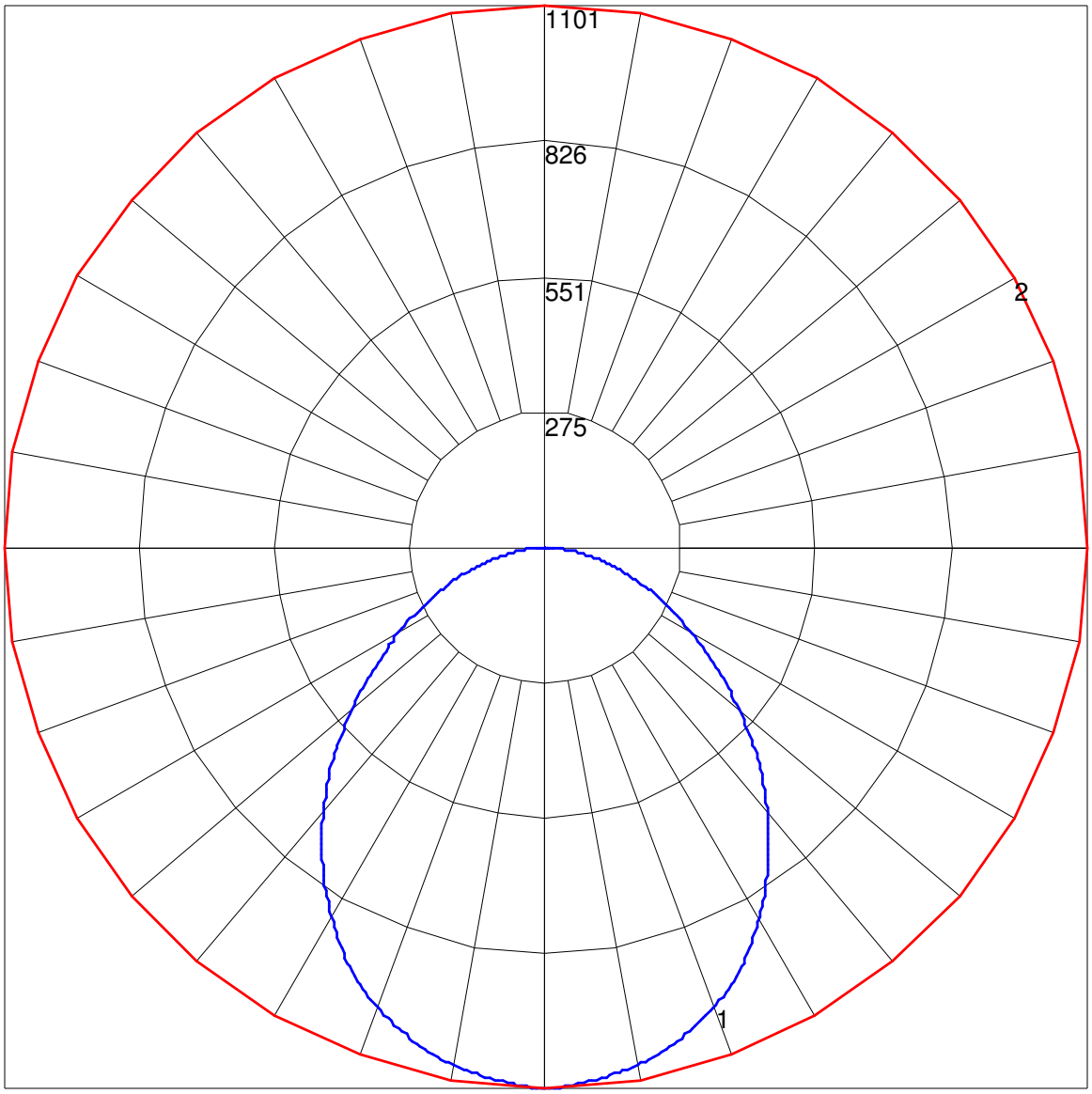
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	26.0	27.6	26.4	27.9	28.2	26.0	27.6	26.4	27.9	28.2
	3H	27.6	29.0	28.0	29.4	29.7	27.6	29.0	28.0	29.4	29.7
	4H	28.2	29.5	28.6	29.9	30.2	28.2	29.5	28.6	29.9	30.2
	6H	28.6	29.8	29.0	30.2	30.6	28.6	29.8	29.0	30.2	30.6
	8H	28.7	29.9	29.1	30.3	30.7	28.7	29.9	29.1	30.3	30.7
	12H	28.8	29.9	29.2	30.3	30.7	28.8	29.9	29.2	30.3	30.7
4H	2H	26.6	27.9	27.0	28.3	28.6	26.6	27.9	27.0	28.3	28.6
	3H	28.4	29.5	28.8	29.9	30.3	28.4	29.5	28.8	29.9	30.3
	4H	29.1	30.1	29.5	30.5	30.9	29.1	30.1	29.5	30.5	30.9
	6H	29.6	30.5	30.1	30.9	31.4	29.6	30.5	30.1	30.9	31.4
	8H	29.7	30.6	30.2	31.0	31.5	29.7	30.6	30.2	31.0	31.5
	12H	29.8	30.6	30.3	31.0	31.5	29.8	30.6	30.3	31.0	31.5
8H	4H	29.3	30.1	29.8	30.6	31.1	29.3	30.1	29.8	30.6	31.1
	6H	29.9	30.6	30.4	31.1	31.6	29.9	30.6	30.4	31.1	31.6
	8H	30.2	30.8	30.7	31.3	31.8	30.2	30.8	30.7	31.3	31.8
	12H	30.3	30.8	30.8	31.3	31.9	30.3	30.8	30.8	31.3	31.9
12H	4H	29.4	30.1	29.8	30.6	31.0	29.4	30.1	29.8	30.6	31.0
	6H	30.0	30.6	30.5	31.1	31.6	30.0	30.6	30.5	31.1	31.6
	8H	30.2	30.8	30.8	31.3	31.8	30.2	30.8	30.8	31.3	31.8

Maximum UGR = 31.9

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POLAR GRAPH



Maximum Candela = 1101.374 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.)

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