IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L50-8TW-DIM-UNV-SW-OF-WH_4000K_.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_4000K_
[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	3152
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	75
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	113814	113814	113814
55	97145	97145	97145
65	82861	82861	82861
75	68520	68520	68520
85	42403	42403	42403

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CANDELA TABULATION

	0
0.0	1326.956
0.5	1326.720
1.0	1326.010
1.5	1325.301
2.0	1323.881
2.5	1322.462
3.0	1320.570
3.5	1318.678
4.0	1316.785
4.5	1314.893
5.0	1313.237
5.5	1311.345
6.0	1309.453
6.5	1307.560
7.0	1305.432
7.5	1303.066
8.0	1300.701
8.5	1298.336
9.0	1295.734
9.5	1293.132
10.0	1290.293
10.5	1287.455
11.0	1284.380
11.5	1281.069
12.0	1277.757
12.5	1274.209
13.0	1270.425
13.5	1266.404
14.0	1262.146
14.5	1257.652
15.0	1252.921
15.5	1248.190
16.0	1243.223
16.5	1238.493
17.0	1233.289
17.5	1228.085
18.0	1222.881
18.5	1217.678
19.0	1212.474
19.5	1207.270
20.0	1202.066
20.5	1196.863
21.0	1191.422
21.5	1185.745
22.0	1179.832
22.5	1173.209
23.0	1166.586
23.5	1159.254
24.0	1151.921
24.5	1144.115
25.0	1136.073
25.5	1128.031
26.0	1119.516
26.5	1111.001

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CANDELA TABULATION - (Cont.)

27.0	1102.249
27.5	1093.261
28.0	1084.272
28.5	1075.521
29.0	1066.769
29.5	1057.780
30.0	1049.029
30.5	1039.804
31.0	1030.343
31.5	1021.118
32.0	1011.656
32.5	1002.195
33.0	992.497
33.5	982.563
34.0	972.865
34.5	962.930
35.0	952.996
35.5	942.825
36.0	932.654
36.5	922.246
37.0	911.839
37.5	901.431
38.0	890.787
38.5	879.907
39.0	869.499
39.5	858.619
40.0	847.738
40.5	837.094
41.0	825.977
41.5	815.333
42.0	804.216
42.5	793.335
43.0	782.218
43.5	770.865
44.0	759.511
44.5	748.157
45.0	736.567
45.5	725.214
46.0	713.623
46.5	702.033
47.0	690.443
47.5	678.616
48.0	667.026
48.5	655.199
49.0	643.609
49.5	632.019
50.0	620.429
50.5	609.075
51.0	597.722
51.5	586.368
52.0	575.251
52.5	564.134
53.0	553.253
53.5	542.373
54.0	531.492
54.5	520.848

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CANDELA TABULATION - (Cont.)

55.0	509.968
55.5	499.323
56.0	489.626
56.5	479.218
57.0	469.284
57.5	459.349
58.0	449.415
58.5	439.480
59.0	430.019
59.5	420.558
60.0	411.096
60.5	402.108
61.0	392.883
61.5	383.422
62.0	374.197
62.5	364.972
63.0	355.984
63.5	346.996
64.0	338.007
64.5	329.255
65.0	320.504
65.5	311.752
66.0	303.000
66.5	294.485
67.0	286.206
67.5	277.928
68.0	269.649
68.5	261.607
69.0	253.565
69.5	245.522
70.0	237.480
70.5	229.675
71.0	221.916
71.5	214.205
72.0	206.589
72.5	199.091
73.0	191.616
73.5	184.213
74.0	176.880
74.5	169.548
75.0	162.310
75.5	155.166
76.0	148.023
76.5	140.951
77.0	133.973
77.5	127.019
78.0	120.159
78.5	113.418
79.0	106.724
79.5	100.101
80.0	93.644
80.5	87.281
81.0	80.989
81.5	74.745
82.0	68.619
82.5	62.587

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CANDELA TABULATION - (Cont.)

83.0	56.626
83.5	50.737
84.0	44.989
84.5	39.336
85.0	33.824
85.5	28.550
86.0	23.630
86.5	19.325
87.0	15.398
87.5	11.874
88.0	8.846
88.5	6.457
89.0	4.494
89.5	2.909
90.0	1.798
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
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120.0	0.000
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127.5	0.000
128.0	0.000
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129.0	0.000
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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
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148.5	0.000
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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
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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	477.77	N.A.	15.20
0-30	999.69	N.A.	31.70
0-40	1594.71	N.A.	50.60
0-60	2619.49	N.A.	83.10
0-80	3109.99	N.A.	98.70
0-90	3151.8	N.A.	100.00
10-90	3027.15	N.A.	96.00
20-40	1116.94	N.A.	35.40
20-50	1684.18	N.A.	53.40
40-70	1343.05	N.A.	42.60
60-80	490.49	N.A.	15.60
70-80	172.22	N.A.	5.50
80-90	41.81	N.A.	1.30
90-110	0.05	N.A.	0.00
90-120	0.05	N.A.	0.00
90-130	0.05	N.A.	0.00
90-150	0.05	N.A.	0.00
90-180	0.05	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3151.84	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	124.65
10-20	353.12
20-30	521.92
30-40	595.02
40-50	567.24
50-60	457.55
60-70	318.27
70-80	172.22
80-90	41.81
90-100	0.05
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	49	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

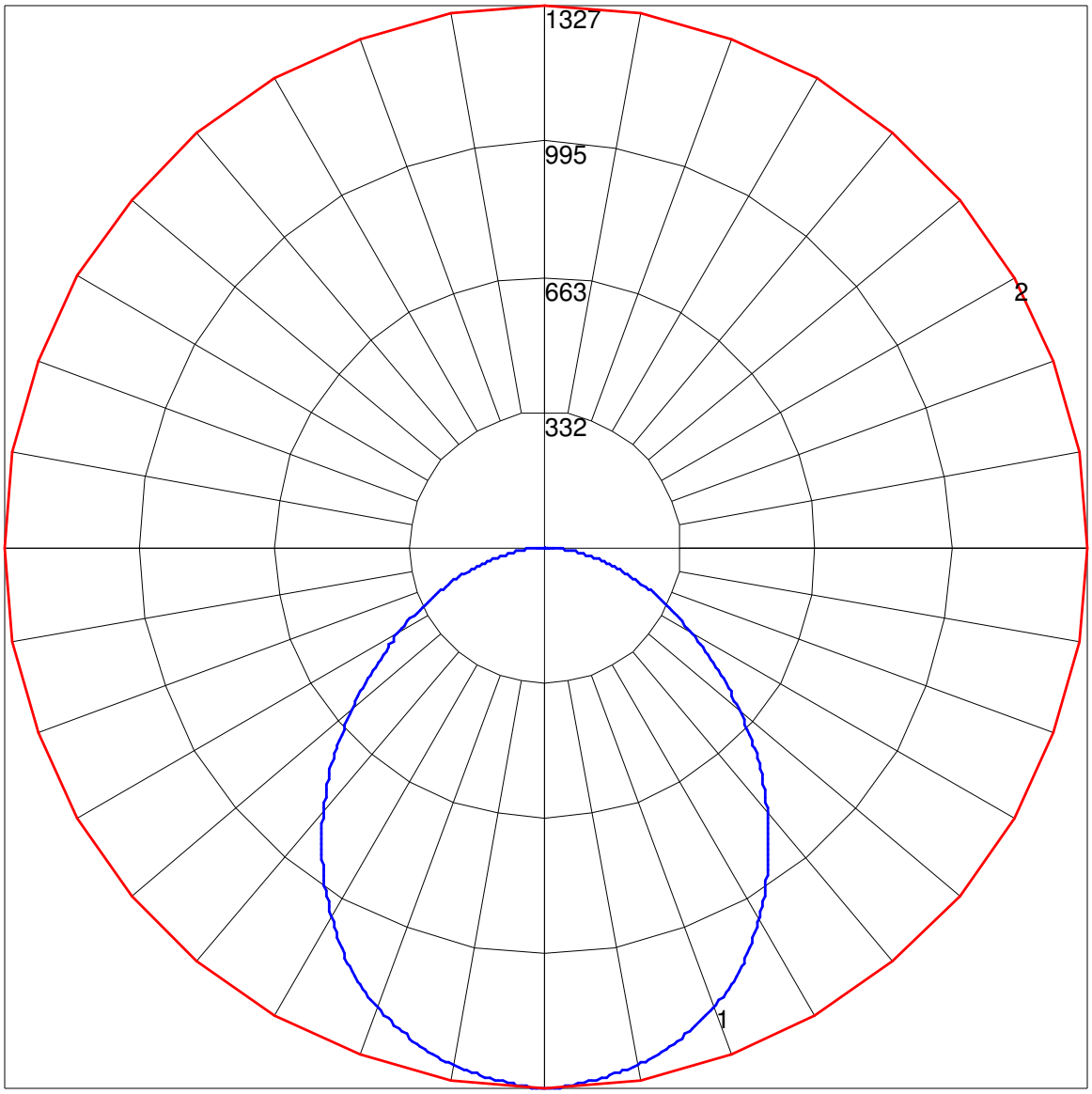
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	26.7	28.3	27.1	28.6	28.9	26.7	28.3	27.1	28.6	28.9
	3H	28.3	29.7	28.7	30.1	30.4	28.3	29.7	28.7	30.1	30.4
	4H	28.9	30.2	29.3	30.6	30.9	28.9	30.2	29.3	30.6	30.9
	6H	29.3	30.5	29.7	30.9	31.3	29.3	30.5	29.7	30.9	31.3
	8H	29.4	30.6	29.8	31.0	31.4	29.4	30.6	29.8	31.0	31.4
	12H	29.5	30.6	29.9	31.0	31.4	29.5	30.6	29.9	31.0	31.4
4H	2H	27.3	28.6	27.7	29.0	29.3	27.3	28.6	27.7	29.0	29.3
	3H	29.1	30.2	29.5	30.6	31.0	29.1	30.2	29.5	30.6	31.0
	4H	29.8	30.8	30.2	31.2	31.6	29.8	30.8	30.2	31.2	31.6
	6H	30.3	31.2	30.8	31.6	32.1	30.3	31.2	30.8	31.6	32.1
	8H	30.4	31.3	30.9	31.7	32.2	30.4	31.3	30.9	31.7	32.2
	12H	30.5	31.3	31.0	31.7	32.2	30.5	31.3	31.0	31.7	32.2
8H	4H	30.0	30.8	30.5	31.3	31.8	30.0	30.8	30.5	31.3	31.8
	6H	30.6	31.3	31.1	31.8	32.3	30.6	31.3	31.1	31.8	32.3
	8H	30.9	31.5	31.4	32.0	32.5	30.9	31.5	31.4	32.0	32.5
	12H	31.0	31.5	31.5	32.0	32.6	31.0	31.5	31.5	32.0	32.6
12H	4H	30.1	30.8	30.5	31.3	31.7	30.1	30.8	30.5	31.3	31.7
	6H	30.7	31.3	31.2	31.8	32.3	30.7	31.3	31.2	31.8	32.3
	8H	30.9	31.5	31.5	32.0	32.5	30.9	31.5	31.5	32.0	32.5

Maximum UGR = 32.6

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POLAR GRAPH



Maximum Candela = 1326.956 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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