IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-8TW-DIM-UNV-SW-OF-WH_5000K_.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-L15-8TW-DIM-UNV-SW-OF-WH_5000K_
[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	875
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	64
Total Luminaire Watts	13.7
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	31590	31590	31590
55	26963	26963	26963
65	22999	22999	22999
75	19018	19018	19018
85	11769	11769	11769

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CANDELA TABULATION

	0
0.0	368.307
0.5	368.242
1.0	368.045
1.5	367.848
2.0	367.454
2.5	367.060
3.0	366.535
3.5	366.009
4.0	365.484
4.5	364.959
5.0	364.499
5.5	363.974
6.0	363.449
6.5	362.924
7.0	362.333
7.5	361.676
8.0	361.020
8.5	360.363
9.0	359.641
9.5	358.919
10.0	358.131
10.5	357.343
11.0	356.490
11.5	355.571
12.0	354.652
12.5	353.667
13.0	352.616
13.5	351.500
14.0	350.319
14.5	349.071
15.0	347.758
15.5	346.445
16.0	345.066
16.5	343.753
17.0	342.309
17.5	340.865
18.0	339.420
18.5	337.976
19.0	336.532
19.5	335.087
20.0	333.643
20.5	332.199
21.0	330.689
21.5	329.113
22.0	327.472
22.5	325.633
23.0	323.795
23.5	321.760
24.0	319.725
24.5	317.558
25.0	315.326
25.5	313.094
26.0	310.730
26.5	308.367

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CANDELA TABULATION - (Cont.)

27.0	305.938
27.5	303.443
28.0	300.948
28.5	298.519
29.0	296.090
29.5	293.595
30.0	291.166
30.5	288.606
31.0	285.980
31.5	283.419
32.0	280.793
32.5	278.167
33.0	275.475
33.5	272.718
34.0	270.026
34.5	267.269
35.0	264.512
35.5	261.689
36.0	258.865
36.5	255.977
37.0	253.088
37.5	250.199
38.0	247.245
38.5	244.225
39.0	241.336
39.5	238.316
40.0	235.296
40.5	232.342
41.0	229.256
41.5	226.302
42.0	223.216
42.5	220.197
43.0	217.111
43.5	213.960
44.0	210.808
44.5	207.657
45.0	204.440
45.5	201.289
46.0	198.072
46.5	194.855
47.0	191.638
47.5	188.355
48.0	185.138
48.5	181.856
49.0	178.639
49.5	175.422
50.0	172.205
50.5	169.054
51.0	165.902
51.5	162.751
52.0	159.665
52.5	156.580
53.0	153.560
53.5	150.540
54.0	147.520
54.5	144.566

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CANDELA TABULATION - (Cont.)

55.0	141.546
55.5	138.591
56.0	135.899
56.5	133.011
57.0	130.253
57.5	127.496
58.0	124.739
58.5	121.981
59.0	119.355
59.5	116.729
60.0	114.103
60.5	111.608
61.0	109.048
61.5	106.422
62.0	103.861
62.5	101.301
63.0	98.806
63.5	96.311
64.0	93.817
64.5	91.387
65.0	88.958
65.5	86.529
66.0	84.100
66.5	81.737
67.0	79.439
67.5	77.141
68.0	74.843
68.5	72.611
69.0	70.379
69.5	68.147
70.0	65.915
70.5	63.748
71.0	61.595
71.5	59.454
72.0	57.340
72.5	55.259
73.0	53.185
73.5	51.130
74.0	49.094
74.5	47.059
75.0	45.050
75.5	43.068
76.0	41.085
76.5	39.122
77.0	37.185
77.5	35.255
78.0	33.351
78.5	31.480
79.0	29.622
79.5	27.784
80.0	25.992
80.5	24.226
81.0	22.479
81.5	20.746
82.0	19.046
82.5	17.371

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CANDELA TABULATION - (Cont.)

83.0	15.717
83.5	14.082
84.0	12.487
84.5	10.918
85.0	9.388
85.5	7.924
86.0	6.559
86.5	5.364
87.0	4.274
87.5	3.296
88.0	2.455
88.5	1.792
89.0	1.247
89.5	0.808
90.0	0.499
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
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121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
123.5	0.000
124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
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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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	132.61	N.A.	15.20
0-30	277.47	N.A.	31.70
0-40	442.62	N.A.	50.60
0-60	727.06	N.A.	83.10
0-80	863.20	N.A.	98.70
0-90	874.81	N.A.	100.00
10-90	840.21	N.A.	96.00
20-40	310.01	N.A.	35.40
20-50	467.46	N.A.	53.40
40-70	372.78	N.A.	42.60
60-80	136.14	N.A.	15.60
70-80	47.80	N.A.	5.50
80-90	11.60	N.A.	1.30
90-110	0.01	N.A.	0.00
90-120	0.01	N.A.	0.00
90-130	0.01	N.A.	0.00
90-150	0.01	N.A.	0.00
90-180	0.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	874.82	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	34.60
10-20	98.01
20-30	144.86
30-40	165.15
40-50	157.44
50-60	127.00
60-70	88.34
70-80	47.80
80-90	11.60
90-100	0.01
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	97	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	44	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

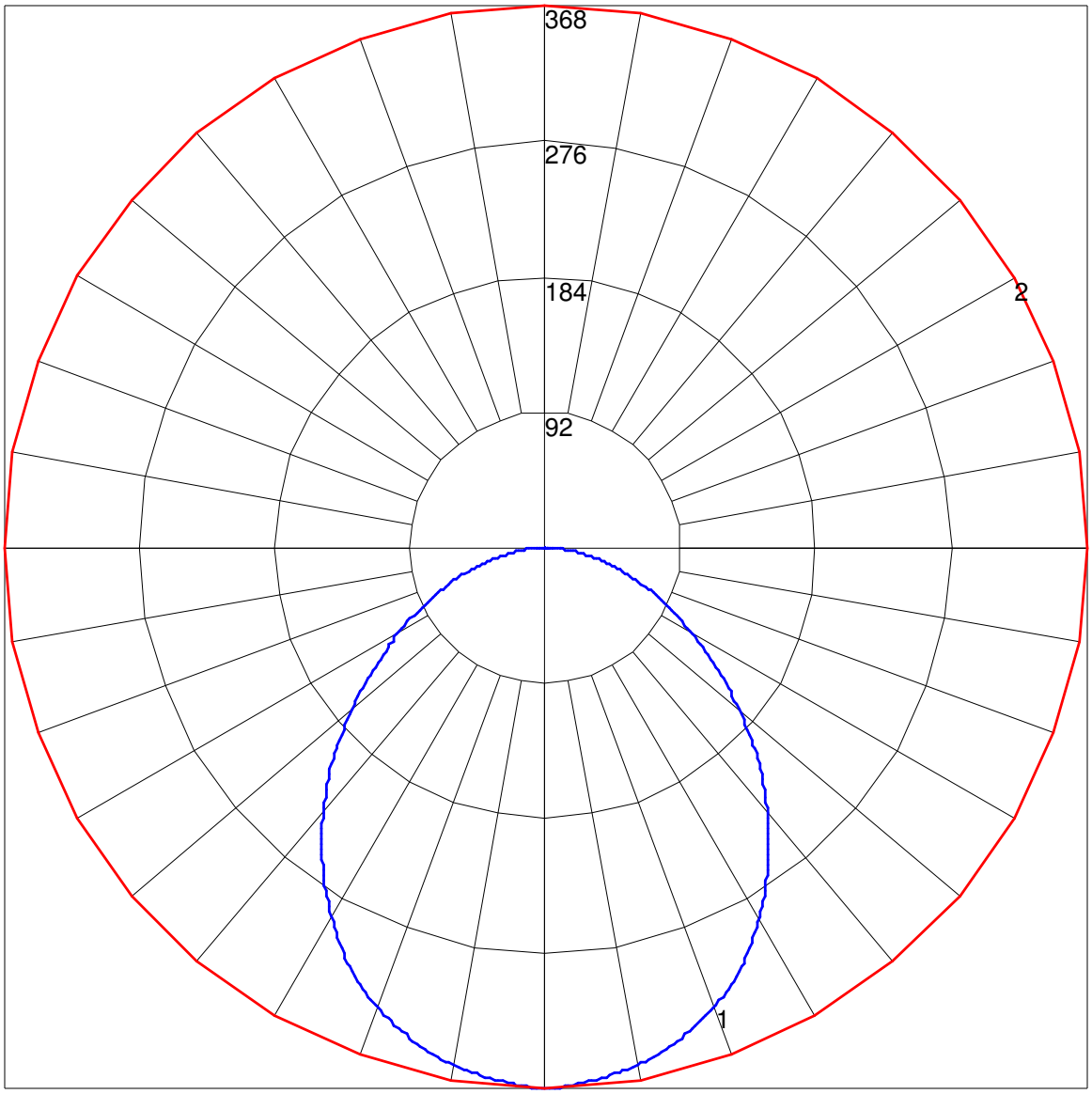
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	22.2	23.8	22.6	24.1	24.4	22.2	23.8	22.6	24.1	24.4
	3H	23.8	25.2	24.2	25.5	25.9	23.8	25.2	24.2	25.5	25.9
	4H	24.4	25.7	24.8	26.1	26.4	24.4	25.7	24.8	26.1	26.4
	6H	24.8	26.0	25.2	26.4	26.8	24.8	26.0	25.2	26.4	26.8
	8H	24.9	26.1	25.3	26.5	26.9	24.9	26.1	25.3	26.5	26.9
	12H	25.0	26.1	25.4	26.5	26.9	25.0	26.1	25.4	26.5	26.9
4H	2H	22.8	24.1	23.2	24.5	24.8	22.8	24.1	23.2	24.5	24.8
	3H	24.6	25.7	25.0	26.1	26.5	24.6	25.7	25.0	26.1	26.5
	4H	25.3	26.3	25.7	26.7	27.1	25.3	26.3	25.7	26.7	27.1
	6H	25.8	26.7	26.2	27.1	27.6	25.8	26.7	26.2	27.1	27.6
	8H	25.9	26.8	26.4	27.2	27.7	25.9	26.8	26.4	27.2	27.7
	12H	26.0	26.8	26.5	27.2	27.7	26.0	26.8	26.5	27.2	27.7
8H	4H	25.5	26.3	26.0	26.8	27.2	25.5	26.3	26.0	26.8	27.2
	6H	26.1	26.8	26.6	27.3	27.8	26.1	26.8	26.6	27.3	27.8
	8H	26.4	27.0	26.9	27.5	28.0	26.4	27.0	26.9	27.5	28.0
	12H	26.5	27.0	27.0	27.5	28.1	26.5	27.0	27.0	27.5	28.1
12H	4H	25.5	26.3	26.0	26.8	27.2	25.5	26.3	26.0	26.8	27.2
	6H	26.2	26.8	26.7	27.3	27.8	26.2	26.8	26.7	27.3	27.8
	8H	26.4	27.0	27.0	27.5	28.0	26.4	27.0	27.0	27.5	28.0

Maximum UGR = 28.1

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POLAR GRAPH



Maximum Candela = 368.307 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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