IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L30-8TW-DIM-UNV-SW-OF-WH_3500K_.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-L30-8TW-DIM-UNV-SW-OF-WH_3500K_
[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	1721
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	69
Total Luminaire Watts	24.9
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	62145	62145	62145
55	53043	53043	53043
65	45244	45244	45244
75	37413	37413	37413
85	23153	23153	23153

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CANDELA TABULATION

	0
0.0	724.548
0.5	724.419
1.0	724.032
1.5	723.644
2.0	722.869
2.5	722.094
3.0	721.061
3.5	720.028
4.0	718.995
4.5	717.962
5.0	717.057
5.5	716.024
6.0	714.991
6.5	713.958
7.0	712.795
7.5	711.504
8.0	710.212
8.5	708.921
9.0	707.500
9.5	706.079
10.0	704.530
10.5	702.980
11.0	701.301
11.5	699.493
12.0	697.685
12.5	695.747
13.0	693.681
13.5	691.485
14.0	689.160
14.5	686.707
15.0	684.123
15.5	681.540
16.0	678.828
16.5	676.245
17.0	673.404
17.5	670.562
18.0	667.721
18.5	664.880
19.0	662.038
19.5	659.197
20.0	656.356
20.5	653.514
21.0	650.544
21.5	647.444
22.0	644.215
22.5	640.599
23.0	636.983
23.5	632.979
24.0	628.975
24.5	624.713
25.0	620.322
25.5	615.931
26.0	611.281
26.5	606.632

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CANDELA TABULATION - (Cont.)

27.0	601.853
27.5	596.945
28.0	592.037
28.5	587.259
29.0	582.480
29.5	577.572
30.0	572.794
30.5	567.757
31.0	562.590
31.5	557.554
32.0	552.387
32.5	547.221
33.0	541.926
33.5	536.502
34.0	531.206
34.5	525.782
35.0	520.357
35.5	514.804
36.0	509.250
36.5	503.568
37.0	497.885
37.5	492.202
38.0	486.390
38.5	480.449
39.0	474.766
39.5	468.825
40.0	462.884
40.5	457.072
41.0	451.002
41.5	445.190
42.0	439.120
42.5	433.179
43.0	427.109
43.5	420.910
44.0	414.710
44.5	408.511
45.0	402.182
45.5	395.983
46.0	389.655
46.5	383.326
47.0	376.998
47.5	370.540
48.0	364.211
48.5	357.754
49.0	351.425
49.5	345.097
50.0	338.768
50.5	332.569
51.0	326.370
51.5	320.170
52.0	314.100
52.5	308.030
53.0	302.089
53.5	296.148
54.0	290.207
54.5	284.395

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CANDELA TABULATION - (Cont.)

55.0	278.454
55.5	272.642
56.0	267.347
56.5	261.664
57.0	256.240
57.5	250.815
58.0	245.391
58.5	239.966
59.0	234.800
59.5	229.634
60.0	224.468
60.5	219.560
61.0	214.523
61.5	209.357
62.0	204.320
62.5	199.283
63.0	194.375
63.5	189.467
64.0	184.560
64.5	179.781
65.0	175.002
65.5	170.224
66.0	165.445
66.5	160.795
67.0	156.275
67.5	151.755
68.0	147.234
68.5	142.843
69.0	138.452
69.5	134.061
70.0	129.670
70.5	125.408
71.0	121.171
71.5	116.961
72.0	112.802
72.5	108.708
73.0	104.627
73.5	100.584
74.0	96.581
74.5	92.577
75.0	88.625
75.5	84.724
76.0	80.824
76.5	76.962
77.0	73.152
77.5	69.355
78.0	65.610
78.5	61.929
79.0	58.274
79.5	54.658
80.0	51.132
80.5	47.657
81.0	44.222
81.5	40.812
82.0	37.467
82.5	34.174

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CANDELA TABULATION - (Cont.)

83.0	30.919
83.5	27.703
84.0	24.565
84.5	21.478
85.0	18.469
85.5	15.589
86.0	12.902
86.5	10.552
87.0	8.408
87.5	6.483
88.0	4.830
88.5	3.526
89.0	2.454
89.5	1.589
90.0	0.982
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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123.5	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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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
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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	260.87	N.A.	15.20
0-30	545.85	N.A.	31.70
0-40	870.75	N.A.	50.60
0-60	1430.3	N.A.	83.10
0-80	1698.12	N.A.	98.70
0-90	1720.95	N.A.	100.00
10-90	1652.89	N.A.	96.00
20-40	609.87	N.A.	35.40
20-50	919.60	N.A.	53.40
40-70	733.34	N.A.	42.60
60-80	267.82	N.A.	15.60
70-80	94.04	N.A.	5.50
80-90	22.83	N.A.	1.30
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	1720.98	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	68.06
10-20	192.81
20-30	284.98
30-40	324.89
40-50	309.72
50-60	249.83
60-70	173.78
70-80	94.04
80-90	22.83
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	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

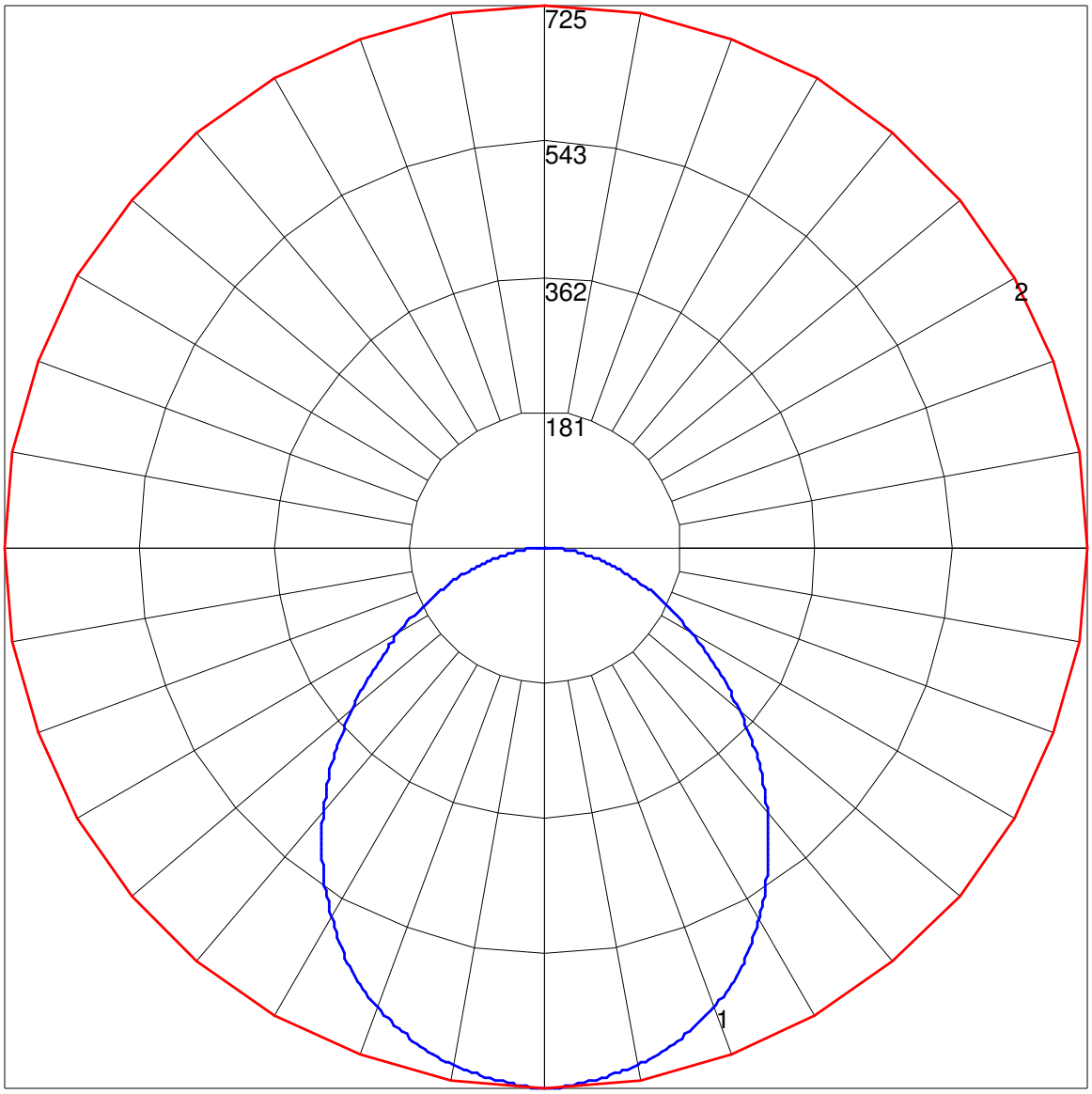
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	24.6	26.2	25.0	26.5	26.8	24.6	26.2	25.0	26.5	26.8
	3H	26.2	27.6	26.6	28.0	28.3	26.2	27.6	26.6	28.0	28.3
	4H	26.8	28.1	27.2	28.5	28.8	26.8	28.1	27.2	28.5	28.8
	6H	27.2	28.4	27.6	28.8	29.2	27.2	28.4	27.6	28.8	29.2
	8H	27.3	28.5	27.7	28.9	29.3	27.3	28.5	27.7	28.9	29.3
	12H	27.4	28.5	27.8	28.9	29.3	27.4	28.5	27.8	28.9	29.3
4H	2H	25.2	26.5	25.6	26.9	27.2	25.2	26.5	25.6	26.9	27.2
	3H	27.0	28.1	27.4	28.5	28.9	27.0	28.1	27.4	28.5	28.9
	4H	27.7	28.7	28.1	29.1	29.5	27.7	28.7	28.1	29.1	29.5
	6H	28.2	29.1	28.7	29.5	30.0	28.2	29.1	28.7	29.5	30.0
	8H	28.3	29.2	28.8	29.6	30.1	28.3	29.2	28.8	29.6	30.1
	12H	28.4	29.2	28.9	29.6	30.1	28.4	29.2	28.9	29.6	30.1
8H	4H	27.9	28.7	28.4	29.2	29.7	27.9	28.7	28.4	29.2	29.7
	6H	28.5	29.2	29.0	29.7	30.2	28.5	29.2	29.0	29.7	30.2
	8H	28.8	29.4	29.3	29.9	30.4	28.8	29.4	29.3	29.9	30.4
	12H	28.9	29.4	29.4	29.9	30.5	28.9	29.4	29.4	29.9	30.5
12H	4H	28.0	28.7	28.4	29.2	29.6	28.0	28.7	28.4	29.2	29.6
	6H	28.6	29.2	29.1	29.7	30.2	28.6	29.2	29.1	29.7	30.2
	8H	28.8	29.4	29.4	29.9	30.4	28.8	29.4	29.4	29.9	30.4

Maximum UGR = 30.5

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POLAR GRAPH



Maximum Candela = 724.548 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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