IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L30-8TW-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-L30-8TW-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	1704
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	68
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	61517	61517	61517
55	52507	52507	52507
65	44787	44787	44787
75	37036	37036	37036
85	22919	22919	22919

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CANDELA TABULATION

	0
0.0	717.230
0.5	717.102
1.0	716.719
1.5	716.335
2.0	715.568
2.5	714.801
3.0	713.778
3.5	712.755
4.0	711.733
4.5	710.710
5.0	709.815
5.5	708.792
6.0	707.769
6.5	706.746
7.0	705.596
7.5	704.317
8.0	703.039
8.5	701.760
9.0	700.354
9.5	698.948
10.0	697.414
10.5	695.879
11.0	694.217
11.5	692.427
12.0	690.638
12.5	688.720
13.0	686.674
13.5	684.501
14.0	682.200
14.5	679.770
15.0	677.213
15.5	674.657
16.0	671.972
16.5	669.415
17.0	666.602
17.5	663.789
18.0	660.977
18.5	658.164
19.0	655.351
19.5	652.539
20.0	649.726
20.5	646.913
21.0	643.973
21.5	640.905
22.0	637.708
22.5	634.129
23.0	630.549
23.5	626.585
24.0	622.622
24.5	618.403
25.0	614.056
25.5	609.709
26.0	605.107
26.5	600.504

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CANDELA TABULATION - (Cont.)

27.0	595.774
27.5	590.916
28.0	586.057
28.5	581.327
29.0	576.597
29.5	571.738
30.0	567.008
30.5	562.022
31.0	556.908
31.5	551.922
32.0	546.808
32.5	541.694
33.0	536.452
33.5	531.083
34.0	525.841
34.5	520.471
35.0	515.102
35.5	509.604
36.0	504.107
36.5	498.481
37.0	492.856
37.5	487.231
38.0	481.477
38.5	475.596
39.0	469.971
39.5	464.090
40.0	458.209
40.5	452.456
41.0	446.447
41.5	440.694
42.0	434.685
42.5	428.804
43.0	422.795
43.5	416.658
44.0	410.522
44.5	404.385
45.0	398.120
45.5	391.983
46.0	385.719
46.5	379.454
47.0	373.190
47.5	366.797
48.0	360.533
48.5	354.140
49.0	347.876
49.5	341.611
50.0	335.347
50.5	329.210
51.0	323.073
51.5	316.936
52.0	310.928
52.5	304.919
53.0	299.038
53.5	293.157
54.0	287.276
54.5	281.522

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CANDELA TABULATION - (Cont.)

55.0	275.641
55.5	269.888
56.0	264.646
56.5	259.021
57.0	253.651
57.5	248.282
58.0	242.912
58.5	237.543
59.0	232.429
59.5	227.315
60.0	222.201
60.5	217.342
61.0	212.356
61.5	207.242
62.0	202.256
62.5	197.270
63.0	192.412
63.5	187.554
64.0	182.695
64.5	177.965
65.0	173.235
65.5	168.504
66.0	163.774
66.5	159.171
67.0	154.697
67.5	150.222
68.0	145.747
68.5	141.400
69.0	137.054
69.5	132.707
70.0	128.360
70.5	124.141
71.0	119.947
71.5	115.780
72.0	111.663
72.5	107.610
73.0	103.570
73.5	99.568
74.0	95.605
74.5	91.642
75.0	87.730
75.5	83.869
76.0	80.008
76.5	76.185
77.0	72.413
77.5	68.655
78.0	64.947
78.5	61.303
79.0	57.685
79.5	54.105
80.0	50.615
80.5	47.176
81.0	43.775
81.5	40.400
82.0	37.089
82.5	33.829

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CANDELA TABULATION - (Cont.)

83.0	30.607
83.5	27.424
84.0	24.317
84.5	21.261
85.0	18.282
85.5	15.431
86.0	12.772
86.5	10.445
87.0	8.323
87.5	6.418
88.0	4.782
88.5	3.490
89.0	2.429
89.5	1.573
90.0	0.972
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
121.0	0.000
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
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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	258.24	N.A.	15.20
0-30	540.34	N.A.	31.70
0-40	861.95	N.A.	50.60
0-60	1415.86	N.A.	83.10
0-80	1680.97	N.A.	98.70
0-90	1703.57	N.A.	100.00
10-90	1636.2	N.A.	96.00
20-40	603.71	N.A.	35.40
20-50	910.31	N.A.	53.40
40-70	725.93	N.A.	42.60
60-80	265.12	N.A.	15.60
70-80	93.09	N.A.	5.50
80-90	22.60	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	1703.6	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	67.37
10-20	190.86
20-30	282.10
30-40	321.61
40-50	306.60
50-60	247.31
60-70	172.03
70-80	93.09
80-90	22.60
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	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	47	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

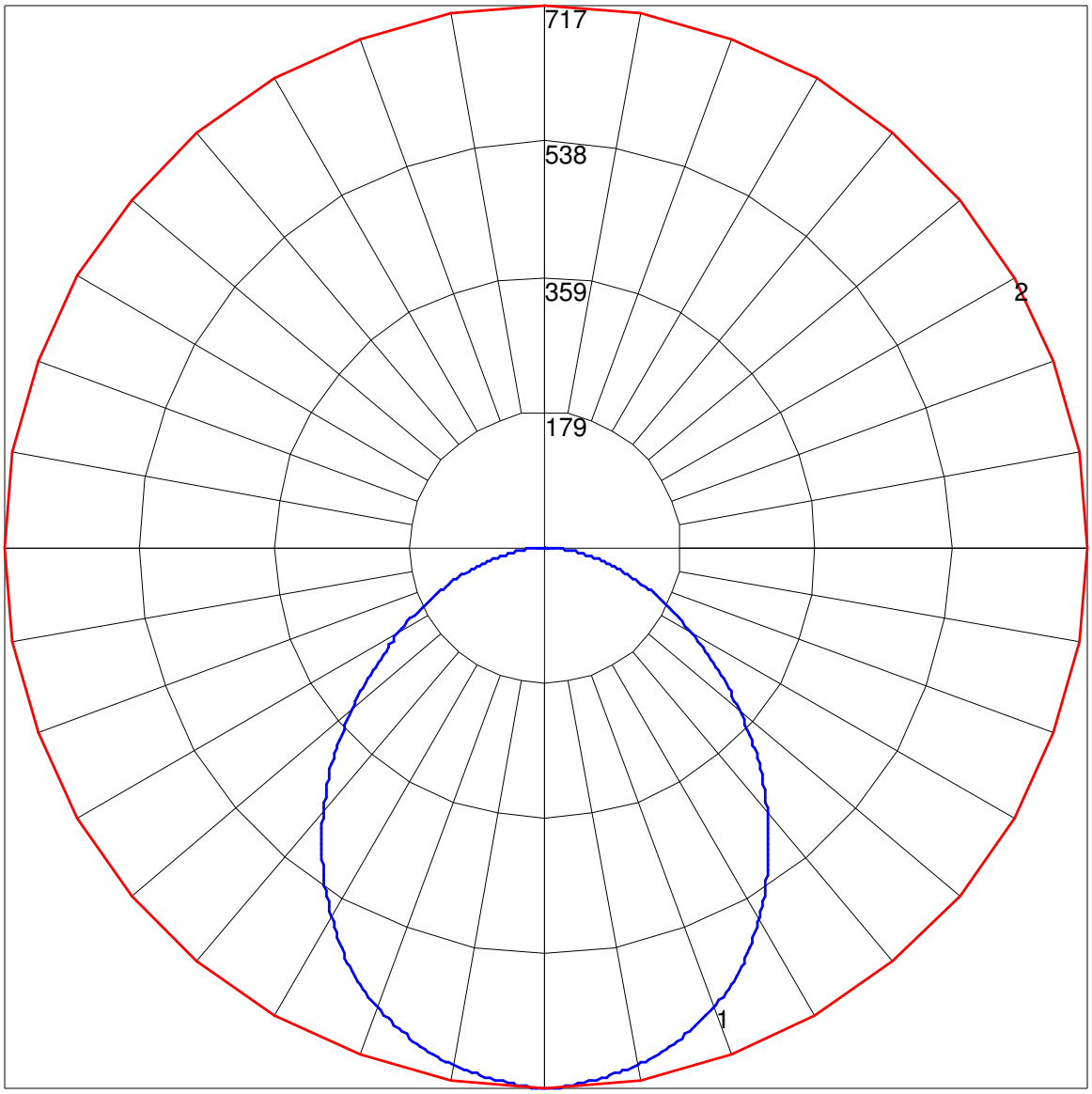
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	24.6	26.2	25.0	26.5	26.8	24.6	26.2	25.0	26.5	26.8
	3H	26.2	27.6	26.6	28.0	28.3	26.2	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 = 717.23 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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