IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L30-8TW-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-L30-8TW-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	1738
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	70
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	62773	62773	62773
55	53579	53579	53579
65	45701	45701	45701
75	37791	37791	37791
85	23387	23387	23387

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L30-8TW-DIM-UNV-SW-OF-WH_4000K_.IES

CANDELA TABULATION

	0
0.0	731.867
0.5	731.737
1.0	731.345
1.5	730.954
2.0	730.171
2.5	729.388
3.0	728.345
3.5	727.301
4.0	726.257
4.5	725.214
5.0	724.301
5.5	723.257
6.0	722.213
6.5	721.170
7.0	719.996
7.5	718.691
8.0	717.386
8.5	716.082
9.0	714.647
9.5	713.212
10.0	711.646
10.5	710.081
11.0	708.385
11.5	706.558
12.0	704.732
12.5	702.775
13.0	700.688
13.5	698.470
14.0	696.122
14.5	693.643
15.0	691.034
15.5	688.425
16.0	685.685
16.5	683.076
17.0	680.206
17.5	677.336
18.0	674.466
18.5	671.596
19.0	668.726
19.5	665.856
20.0	662.986
20.5	660.115
21.0	657.115
21.5	653.984
22.0	650.723
22.5	647.070
23.0	643.417
23.5	639.373
24.0	635.329
24.5	631.023
25.0	626.588
25.5	622.152
26.0	617.456
26.5	612.759

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

CANDELA TABULATION - (Cont.)

27.0	607.932
27.5	602.975
28.0	598.018
28.5	593.191
29.0	588.364
29.5	583.406
30.0	578.579
30.5	573.492
31.0	568.273
31.5	563.185
32.0	557.967
32.5	552.749
33.0	547.400
33.5	541.921
34.0	536.572
34.5	531.093
35.0	525.614
35.5	520.004
36.0	514.394
36.5	508.654
37.0	502.914
37.5	497.174
38.0	491.303
38.5	485.302
39.0	479.562
39.5	473.561
40.0	467.560
40.5	461.689
41.0	455.558
41.5	449.687
42.0	443.556
42.5	437.555
43.0	431.423
43.5	425.161
44.0	418.899
44.5	412.637
45.0	406.245
45.5	399.983
46.0	393.591
46.5	387.198
47.0	380.806
47.5	374.283
48.0	367.890
48.5	361.368
49.0	354.975
49.5	348.583
50.0	342.190
50.5	335.928
51.0	329.666
51.5	323.404
52.0	317.273
52.5	311.141
53.0	305.140
53.5	299.139
54.0	293.138
54.5	287.268

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

CANDELA TABULATION - (Cont.)

55.0	281.267
55.5	275.396
56.0	270.047
56.5	264.307
57.0	258.828
57.5	253.349
58.0	247.869
58.5	242.390
59.0	237.172
59.5	231.954
60.0	226.735
60.5	221.778
61.0	216.690
61.5	211.472
62.0	206.384
62.5	201.296
63.0	196.339
63.5	191.381
64.0	186.424
64.5	181.597
65.0	176.770
65.5	171.943
66.0	167.116
66.5	162.420
67.0	157.854
67.5	153.288
68.0	148.722
68.5	144.286
69.0	139.851
69.5	135.415
70.0	130.979
70.5	126.674
71.0	122.395
71.5	118.142
72.0	113.942
72.5	109.806
73.0	105.684
73.5	101.600
74.0	97.556
74.5	93.512
75.0	89.520
75.5	85.580
76.0	81.640
76.5	77.740
77.0	73.891
77.5	70.056
78.0	66.272
78.5	62.554
79.0	58.862
79.5	55.210
80.0	51.648
80.5	48.139
81.0	44.669
81.5	41.225
82.0	37.846
82.5	34.519

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

CANDELA TABULATION - (Cont.)

83.0	31.232
83.5	27.983
84.0	24.813
84.5	21.695
85.0	18.655
85.5	15.746
86.0	13.033
86.5	10.658
87.0	8.493
87.5	6.549
88.0	4.879
88.5	3.561
89.0	2.479
89.5	1.605
90.0	0.991
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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

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
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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L30-8TW-DIM-UNV-SW-OF-WH_4000K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	263.51	N.A.	15.20
0-30	551.37	N.A.	31.70
0-40	879.54	N.A.	50.60
0-60	1444.75	N.A.	83.10
0-80	1715.28	N.A.	98.70
0-90	1738.34	N.A.	100.00
10-90	1669.59	N.A.	96.00
20-40	616.03	N.A.	35.40
20-50	928.89	N.A.	53.40
40-70	740.75	N.A.	42.60
60-80	270.53	N.A.	15.60
70-80	94.99	N.A.	5.50
80-90	23.06	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	1738.36	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	68.75
10-20	194.76
20-30	287.86
30-40	328.18
40-50	312.85
50-60	252.35
60-70	175.54
70-80	94.99
80-90	23.06
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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L30-8TW-DIM-UNV-SW-OF-WH_4000K_.IES

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	61	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	36	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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L30-8TW-DIM-UNV-SW-OF-WH_4000K_.IES

UGR TABLE - CORRECTED

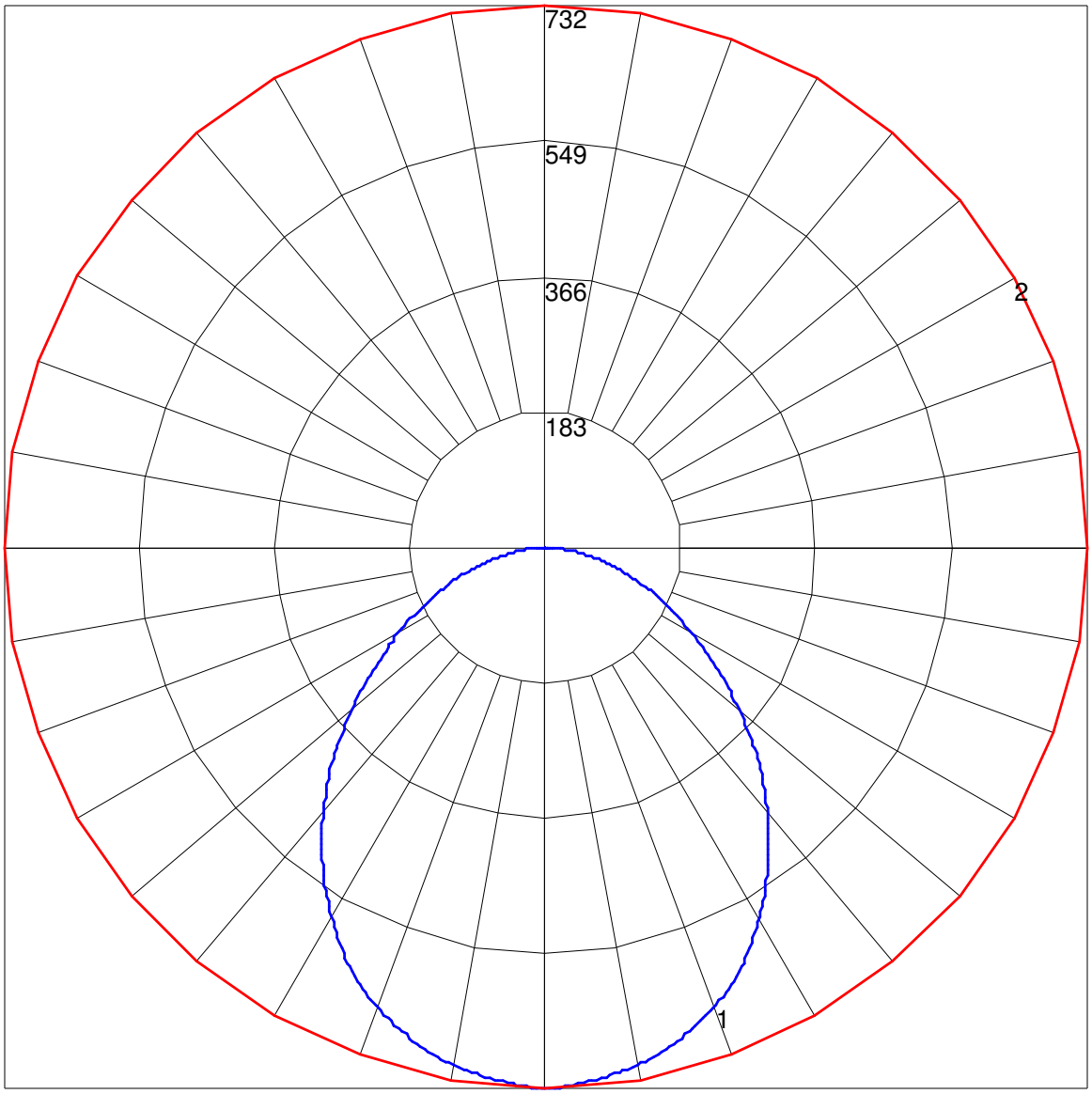
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	24.6	26.2	25.0	26.5	26.8	24.6	26.2	25.0	26.5	26.8
	3H	26.2	27.6	26.6	28.0	28.3	26.2	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	28.6	29.5	30.0	28.2	29.1	28.6	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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L30-8TW-DIM-UNV-SW-OF-WH_4000K_.IES

POLAR GRAPH



Maximum Candela = 731.867 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.)

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.