IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L10-8TW-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-L10-8TW-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	590
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	62
Total Luminaire Watts	9.5
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	21296	21296	21296
55	18177	18177	18177
65	15504	15504	15504
75	12821	12821	12821
85	7934	7934	7934

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CANDELA TABULATION

	0
0.0	248.288
0.5	248.243
1.0	248.111
1.5	247.978
2.0	247.712
2.5	247.447
3.0	247.093
3.5	246.739
4.0	246.385
4.5	246.031
5.0	245.721
5.5	245.367
6.0	245.013
6.5	244.659
7.0	244.260
7.5	243.818
8.0	243.375
8.5	242.932
9.0	242.446
9.5	241.959
10.0	241.428
10.5	240.897
11.0	240.321
11.5	239.702
12.0	239.082
12.5	238.418
13.0	237.710
13.5	236.958
14.0	236.161
14.5	235.320
15.0	234.435
15.5	233.550
16.0	232.620
16.5	231.735
17.0	230.762
17.5	229.788
18.0	228.814
18.5	227.840
19.0	226.867
19.5	225.893
20.0	224.919
20.5	223.946
21.0	222.928
21.5	221.866
22.0	220.759
22.5	219.520
23.0	218.281
23.5	216.909
24.0	215.537
24.5	214.076
25.0	212.571
25.5	211.067
26.0	209.473
26.5	207.880

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CANDELA TABULATION - (Cont.)

27.0	206.243
27.5	204.561
28.0	202.879
28.5	201.241
29.0	199.604
29.5	197.922
30.0	196.285
30.5	194.558
31.0	192.788
31.5	191.062
32.0	189.292
32.5	187.521
33.0	185.707
33.5	183.848
34.0	182.033
34.5	180.175
35.0	178.316
35.5	176.413
36.0	174.510
36.5	172.562
37.0	170.615
37.5	168.667
38.0	166.676
38.5	164.640
39.0	162.693
39.5	160.657
40.0	158.621
40.5	156.629
41.0	154.549
41.5	152.558
42.0	150.477
42.5	148.442
43.0	146.361
43.5	144.237
44.0	142.113
44.5	139.988
45.0	137.820
45.5	135.695
46.0	133.527
46.5	131.358
47.0	129.189
47.5	126.976
48.0	124.808
48.5	122.595
49.0	120.426
49.5	118.258
50.0	116.089
50.5	113.965
51.0	111.840
51.5	109.716
52.0	107.636
52.5	105.555
53.0	103.520
53.5	101.484
54.0	99.448
54.5	97.456

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CANDELA TABULATION - (Cont.)

55.0	95.420
55.5	93.429
56.0	91.614
56.5	89.667
57.0	87.808
57.5	85.949
58.0	84.090
58.5	82.231
59.0	80.461
59.5	78.691
60.0	76.921
60.5	75.239
61.0	73.513
61.5	71.742
62.0	70.016
62.5	68.290
63.0	66.608
63.5	64.927
64.0	63.245
64.5	61.607
65.0	59.970
65.5	58.332
66.0	56.695
66.5	55.101
67.0	53.552
67.5	52.003
68.0	50.454
68.5	48.949
69.0	47.445
69.5	45.940
70.0	44.435
70.5	42.975
71.0	41.523
71.5	40.080
72.0	38.655
72.5	37.252
73.0	35.853
73.5	34.468
74.0	33.096
74.5	31.724
75.0	30.370
75.5	29.033
76.0	27.697
76.5	26.373
77.0	25.068
77.5	23.767
78.0	22.483
78.5	21.222
79.0	19.969
79.5	18.730
80.0	17.522
80.5	16.331
81.0	15.154
81.5	13.986
82.0	12.839
82.5	11.711

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CANDELA TABULATION - (Cont.)

83.0	10.595
83.5	9.493
84.0	8.418
84.5	7.360
85.0	6.329
85.5	5.342
86.0	4.421
86.5	3.616
87.0	2.881
87.5	2.222
88.0	1.655
88.5	1.208
89.0	0.841
89.5	0.544
90.0	0.336
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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119.5	0.000
120.0	0.000
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122.0	0.000
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124.0	0.000
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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
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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
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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	89.40	N.A.	15.20
0-30	187.05	N.A.	31.70
0-40	298.39	N.A.	50.60
0-60	490.14	N.A.	83.10
0-80	581.91	N.A.	98.70
0-90	589.73	N.A.	100.00
10-90	566.41	N.A.	96.00
20-40	208.99	N.A.	35.40
20-50	315.13	N.A.	53.40
40-70	251.30	N.A.	42.60
60-80	91.78	N.A.	15.60
70-80	32.22	N.A.	5.50
80-90	7.82	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	589.74	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	23.32
10-20	66.07
20-30	97.66
30-40	111.33
40-50	106.14
50-60	85.61
60-70	59.55
70-80	32.22
80-90	7.82
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	109	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	64	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

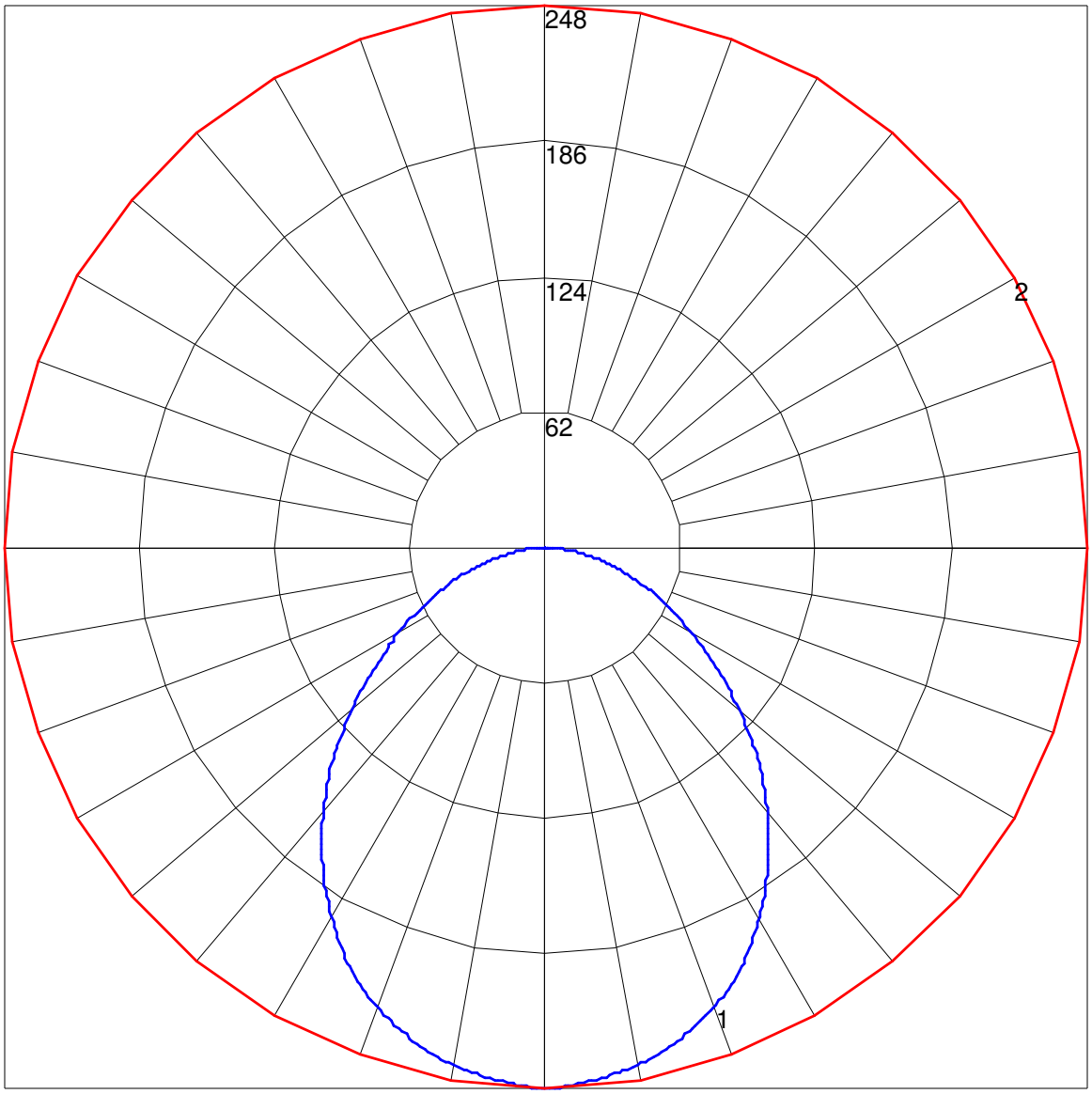
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	20.9	22.5	21.3	22.8	23.1	20.9	22.5	21.3	22.8	23.1
	3H	22.5	23.9	22.9	24.3	24.6	22.5	23.9	22.9	24.3	24.6
	4H	23.1	24.4	23.5	24.8	25.1	23.1	24.4	23.5	24.8	25.1
	6H	23.5	24.7	23.9	25.1	25.5	23.5	24.7	23.9	25.1	25.5
	8H	23.6	24.8	24.0	25.2	25.6	23.6	24.8	24.0	25.2	25.6
	12H	23.7	24.8	24.1	25.2	25.6	23.7	24.8	24.1	25.2	25.6
4H	2H	21.5	22.8	21.9	23.2	23.5	21.5	22.8	21.9	23.2	23.5
	3H	23.3	24.4	23.7	24.8	25.2	23.3	24.4	23.7	24.8	25.2
	4H	24.0	25.0	24.4	25.4	25.8	24.0	25.0	24.4	25.4	25.8
	6H	24.5	25.4	24.9	25.8	26.3	24.5	25.4	24.9	25.8	26.3
	8H	24.6	25.5	25.1	25.9	26.4	24.6	25.5	25.1	25.9	26.4
	12H	24.7	25.5	25.2	25.9	26.4	24.7	25.5	25.2	25.9	26.4
8H	4H	24.2	25.0	24.7	25.5	26.0	24.2	25.0	24.7	25.5	26.0
	6H	24.8	25.5	25.3	26.0	26.5	24.8	25.5	25.3	26.0	26.5
	8H	25.1	25.7	25.6	26.2	26.7	25.1	25.7	25.6	26.2	26.7
	12H	25.2	25.7	25.7	26.2	26.8	25.2	25.7	25.7	26.2	26.8
12H	4H	24.3	25.0	24.7	25.5	25.9	24.3	25.0	24.7	25.5	25.9
	6H	24.9	25.5	25.4	26.0	26.5	24.9	25.5	25.4	26.0	26.5
	8H	25.1	25.7	25.7	26.2	26.7	25.1	25.7	25.7	26.2	26.7

Maximum UGR = 26.8

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POLAR GRAPH



Maximum Candela = 248.288 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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