IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L10-8TW-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-L10-8TW-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	602
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	63
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	21730	21730	21730
55	18548	18548	18548
65	15821	15821	15821
75	13083	13083	13083
85	8096	8096	8096

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CANDELA TABULATION

	0
0.0	253.355
0.5	253.310
1.0	253.174
1.5	253.039
2.0	252.768
2.5	252.497
3.0	252.135
3.5	251.774
4.0	251.413
4.5	251.052
5.0	250.735
5.5	250.374
6.0	250.013
6.5	249.652
7.0	249.245
7.5	248.794
8.0	248.342
8.5	247.890
9.0	247.394
9.5	246.897
10.0	246.355
10.5	245.813
11.0	245.226
11.5	244.594
12.0	243.961
12.5	243.284
13.0	242.561
13.5	241.794
14.0	240.981
14.5	240.123
15.0	239.219
15.5	238.316
16.0	237.368
16.5	236.465
17.0	235.471
17.5	234.477
18.0	233.484
18.5	232.490
19.0	231.497
19.5	230.503
20.0	229.510
20.5	228.516
21.0	227.477
21.5	226.394
22.0	225.265
22.5	224.000
23.0	222.735
23.5	221.335
24.0	219.935
24.5	218.445
25.0	216.910
25.5	215.374
26.0	213.748
26.5	212.123

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CANDELA TABULATION - (Cont.)

27.0	210.452
27.5	208.735
28.0	207.019
28.5	205.348
29.0	203.677
29.5	201.961
30.0	200.290
30.5	198.529
31.0	196.723
31.5	194.961
32.0	193.155
32.5	191.348
33.0	189.497
33.5	187.600
34.0	185.748
34.5	183.852
35.0	181.955
35.5	180.013
36.0	178.071
36.5	176.084
37.0	174.097
37.5	172.110
38.0	170.077
38.5	168.000
39.0	166.013
39.5	163.935
40.0	161.858
40.5	159.826
41.0	157.703
41.5	155.671
42.0	153.548
42.5	151.471
43.0	149.348
43.5	147.181
44.0	145.013
44.5	142.845
45.0	140.632
45.5	138.465
46.0	136.252
46.5	134.039
47.0	131.826
47.5	129.568
48.0	127.355
48.5	125.097
49.0	122.884
49.5	120.671
50.0	118.458
50.5	116.290
51.0	114.123
51.5	111.955
52.0	109.832
52.5	107.710
53.0	105.632
53.5	103.555
54.0	101.477
54.5	99.445

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CANDELA TABULATION - (Cont.)

55.0	97.368
55.5	95.335
56.0	93.484
56.5	91.497
57.0	89.600
57.5	87.703
58.0	85.806
58.5	83.910
59.0	82.103
59.5	80.297
60.0	78.490
60.5	76.774
61.0	75.013
61.5	73.206
62.0	71.445
62.5	69.684
63.0	67.968
63.5	66.252
64.0	64.535
64.5	62.865
65.0	61.194
65.5	59.523
66.0	57.852
66.5	56.226
67.0	54.645
67.5	53.065
68.0	51.484
68.5	49.948
69.0	48.413
69.5	46.877
70.0	45.342
70.5	43.852
71.0	42.370
71.5	40.898
72.0	39.444
72.5	38.012
73.0	36.585
73.5	35.172
74.0	33.772
74.5	32.372
75.0	30.990
75.5	29.626
76.0	28.262
76.5	26.912
77.0	25.579
77.5	24.252
78.0	22.942
78.5	21.655
79.0	20.377
79.5	19.112
80.0	17.879
80.5	16.665
81.0	15.463
81.5	14.271
82.0	13.101
82.5	11.950

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CANDELA TABULATION - (Cont.)

83.0	10.812
83.5	9.687
84.0	8.590
84.5	7.510
85.0	6.458
85.5	5.451
86.0	4.512
86.5	3.690
87.0	2.940
87.5	2.267
88.0	1.689
88.5	1.233
89.0	0.858
89.5	0.555
90.0	0.343
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
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

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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	91.22	N.A.	15.20
0-30	190.87	N.A.	31.70
0-40	304.48	N.A.	50.60
0-60	500.14	N.A.	83.10
0-80	593.79	N.A.	98.70
0-90	601.77	N.A.	100.00
10-90	577.97	N.A.	96.00
20-40	213.26	N.A.	35.40
20-50	321.56	N.A.	53.40
40-70	256.43	N.A.	42.60
60-80	93.65	N.A.	15.60
70-80	32.88	N.A.	5.50
80-90	7.98	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	601.78	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	23.80
10-20	67.42
20-30	99.65
30-40	113.61
40-50	108.30
50-60	87.36
60-70	60.77
70-80	32.88
80-90	7.98
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	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

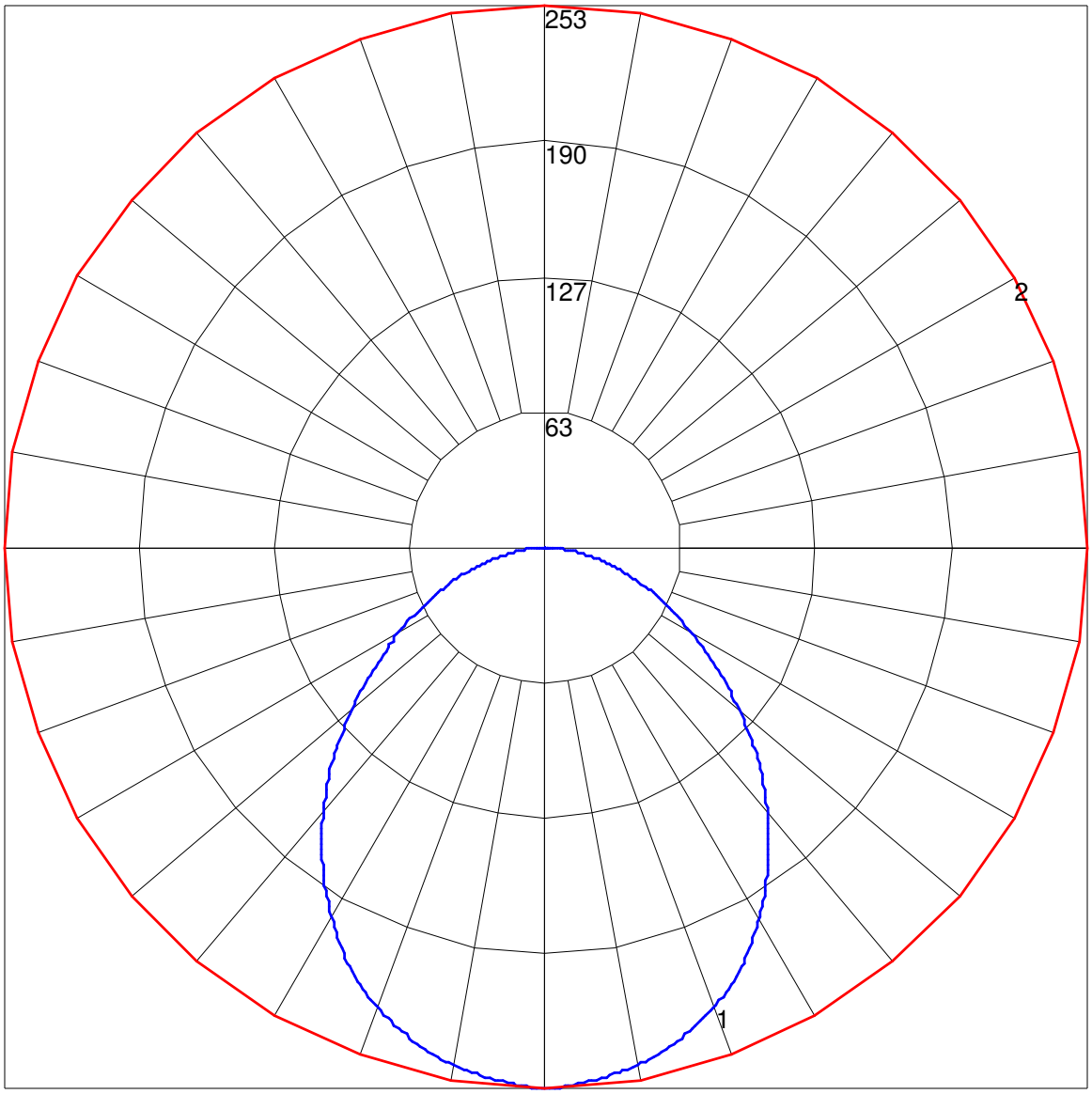
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	20.9	22.5	21.3	22.8	23.1	20.9	22.5	21.3	22.8	23.1
	3H	22.5	23.9	22.9	24.3	24.6	22.5	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	25.0	25.8	26.3	24.5	25.4	25.0	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 = 253.355 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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