

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12316380.07

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 02-18-2026

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMCAT] 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD

[LUMINAIRE] Black formed aluminum housing, specular reflector, clear patt

[MORE] erned glass lens enclosure

[LAMP] One white LED

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Corridor, Hotel, Industrial, Office, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	710
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	51
Total Luminaire Watts	13.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.00
Spacing Criterion (90-270)	1.00
Spacing Criterion (Diagonal)	0.90
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	19590	19590	19590
55	16097	16097	16097
65	11776	11776	11776
75	8152	8152	8152
85	4444	4444	4444

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

CANDELA TABULATION

	<u>0</u>
0.0	498.673
0.5	498.515
1.0	498.200
1.5	497.780
2.0	497.360
2.5	496.887
3.0	496.257
3.5	495.889
4.0	495.627
4.5	495.469
5.0	495.259
5.5	495.049
6.0	494.891
6.5	494.681
7.0	494.524
7.5	494.419
8.0	494.366
8.5	494.208
9.0	494.051
9.5	493.736
10.0	493.526
10.5	493.158
11.0	492.790
11.5	492.318
12.0	491.793
12.5	491.162
13.0	490.427
13.5	489.587
14.0	488.536
14.5	487.276
15.0	485.753
15.5	483.915
16.0	481.866
16.5	479.451
17.0	476.825
17.5	473.883
18.0	470.417
18.5	466.846
19.0	462.959
19.5	458.600
20.0	453.821
20.5	448.622
21.0	443.002
21.5	436.962
22.0	430.292
22.5	423.202
23.0	415.587
23.5	407.394
24.0	398.570
24.5	389.169
25.0	378.981
25.5	368.319
26.0	356.923
26.5	344.843

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

CANDELA TABULATION - (Cont.)

27.0	332.343
27.5	319.319
28.0	306.084
28.5	292.796
29.0	279.771
29.5	267.009
30.0	254.720
30.5	243.165
31.0	232.346
31.5	222.473
32.0	213.492
32.5	205.404
33.0	198.209
33.5	191.801
34.0	186.077
34.5	181.035
35.0	176.466
35.5	172.316
36.0	168.640
36.5	165.174
37.0	162.023
37.5	159.082
38.0	156.351
38.5	153.725
39.0	151.309
39.5	148.945
40.0	146.739
40.5	144.534
41.0	142.433
41.5	140.385
42.0	138.441
42.5	136.498
43.0	134.555
43.5	132.612
44.0	130.669
44.5	128.725
45.0	126.782
45.5	124.839
46.0	122.896
46.5	120.952
47.0	118.904
47.5	116.856
48.0	114.808
48.5	112.707
49.0	110.554
49.5	108.400
50.0	106.299
50.5	104.146
51.0	101.993
51.5	99.840
52.0	97.739
52.5	95.638
53.0	93.485
53.5	91.279
54.0	89.021
54.5	86.762

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

CANDELA TABULATION - (Cont.)

55.0	84.504
55.5	82.246
56.0	80.040
56.5	77.886
57.0	75.733
57.5	73.580
58.0	71.479
58.5	69.431
59.0	67.383
59.5	65.387
60.0	63.444
60.5	61.500
61.0	59.610
61.5	57.771
62.0	55.933
62.5	54.095
63.0	52.341
63.5	50.597
64.0	48.885
64.5	47.199
65.0	45.550
65.5	43.943
66.0	42.357
66.5	40.813
67.0	39.306
67.5	37.825
68.0	36.391
68.5	34.988
69.0	33.586
69.5	32.231
70.0	30.913
70.5	29.616
71.0	28.350
71.5	27.116
72.0	25.924
72.5	24.747
73.0	23.602
73.5	22.489
74.0	21.396
74.5	20.341
75.0	19.311
75.5	18.314
76.0	17.337
76.5	16.386
77.0	15.477
77.5	14.574
78.0	13.702
78.5	12.857
79.0	12.027
79.5	11.229
80.0	10.446
80.5	9.685
81.0	8.934
81.5	8.204
82.0	7.489
82.5	6.796

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

CANDELA TABULATION - (Cont.)

83.0	6.108
83.5	5.441
84.0	4.790
84.5	4.154
85.0	3.545
85.5	2.957
86.0	2.395
86.5	1.864
87.0	1.397
87.5	1.008
88.0	0.704
88.5	0.446
89.0	0.278
89.5	0.189
90.0	0.131
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	183.17	N.A.	25.80
0-30	351.34	N.A.	49.50
0-40	465.90	N.A.	65.60
0-60	639.06	N.A.	90.00
0-80	705.44	N.A.	99.40
0-90	709.88	N.A.	100.00
10-90	662.65	N.A.	93.30
20-40	282.73	N.A.	39.80
20-50	380.36	N.A.	53.60
40-70	218.71	N.A.	30.80
60-80	66.38	N.A.	9.40
70-80	20.83	N.A.	2.90
80-90	4.44	N.A.	0.60
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	709.88	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	47.23
10-20	135.94
20-30	168.17
30-40	114.55
40-50	97.64
50-60	75.52
60-70	45.55
70-80	20.83
80-90	4.44
90-100	0.00
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.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	111	107	104	101	109	105	102	100	101	99	96	97	95	93	94	92	91	89
2	103	97	91	87	101	95	90	86	92	87	84	89	85	82	86	83	80	78
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	79	67	60	54	77	66	59	54	65	58	54	63	58	53	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47
8	69	58	51	46	68	57	50	45	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	47	42	39	37

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-940-DIM-UNV-LW-OF-CS-AD_.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

X=2H	Y=2H	19.4	20.8	19.8	21.1	21.4	19.4	20.8	19.8	21.1	21.4
	3H	20.5	21.7	20.9	22.1	22.4	20.5	21.7	20.9	22.1	22.4
	4H	20.9	22.0	21.3	22.4	22.7	20.9	22.0	21.3	22.4	22.7
	6H	21.1	22.1	21.5	22.5	22.9	21.1	22.1	21.5	22.5	22.9
	8H	21.1	22.1	21.6	22.5	22.9	21.1	22.1	21.6	22.5	22.9
	12H	21.1	22.1	21.6	22.5	22.9	21.1	22.1	21.6	22.5	22.9

UGR Viewed Endwise

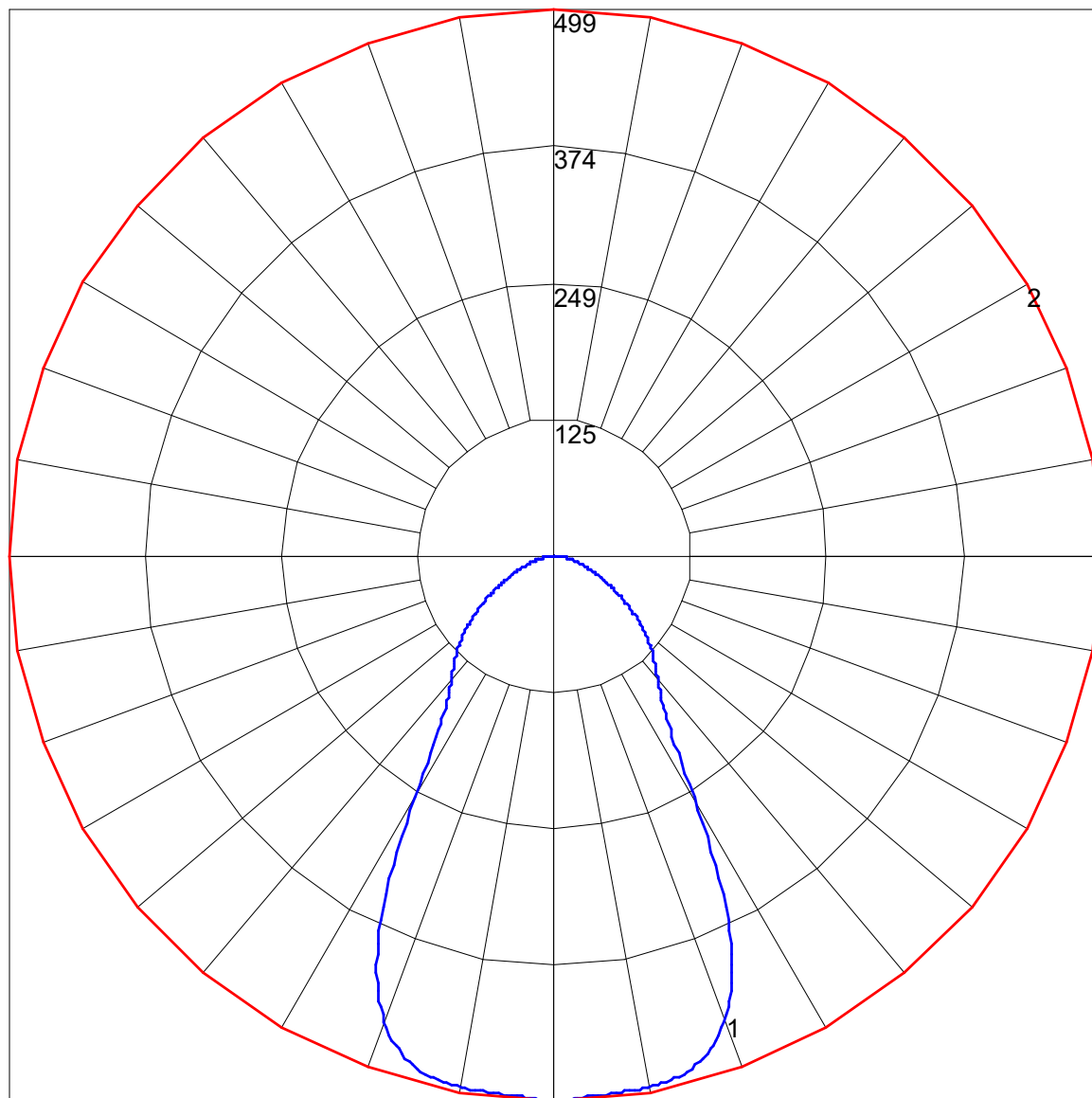
4H	2H	19.8	20.9	20.2	21.3	21.6	19.8	20.9	20.2	21.3	21.6
	3H	21.1	22.0	21.5	22.4	22.8	21.1	22.0	21.5	22.4	22.8
	4H	21.5	22.4	21.9	22.8	23.2	21.5	22.4	21.9	22.8	23.2
	6H	21.8	22.6	22.3	23.0	23.5	21.8	22.6	22.3	23.0	23.5
	8H	21.9	22.6	22.4	23.0	23.5	21.9	22.6	22.4	23.0	23.5
	12H	21.9	22.5	22.4	23.0	23.5	21.9	22.5	22.4	23.0	23.5

8H	4H	21.6	22.3	22.1	22.8	23.2	21.6	22.3	22.1	22.8	23.2
	6H	22.0	22.6	22.5	23.1	23.6	22.0	22.6	22.5	23.1	23.6
	8H	22.1	22.6	22.7	23.2	23.6	22.1	22.6	22.7	23.2	23.6
	12H	22.2	22.6	22.7	23.1	23.7	22.2	22.6	22.7	23.1	23.7

12H	4H	21.6	22.2	22.1	22.7	23.2	21.6	22.2	22.1	22.7	23.2
	6H	22.0	22.5	22.6	23.0	23.5	22.0	22.5	22.6	23.0	23.5
	8H	22.2	22.6	22.7	23.1	23.7	22.2	22.6	22.7	23.1	23.7

Maximum UGR = 23.7

POLAR GRAPH



Maximum Candela = 498.673 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.)