

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L8-840-DIM-UNV-LW-OF_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 13257153.01

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 2025-05-20

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V2DR-L8-840-DIM-UNV-LW-OF_

[LUMINAIRE] Aluminum housing, optics, and trim enclosure

[LAMP] One white LED

[OTHER] This test was performed using the calibrated photodetector met

[MORE] hod of absolute photometry.

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Downlight, Vandal-Resistant

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	830
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
Total Luminaire Watts	10.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.86
Spacing Criterion (90-270)	0.86
Spacing Criterion (Diagonal)	0.78
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.21 ft (Diameter)
Luminous Width (90-270)	0.21 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	34244	34244	34244
55	29908	29908	29908
65	25549	25549	25549
75	20613	20613	20613
85	11547	11547	11547

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CANDELA TABULATION

	<u>0</u>
0.0	979.609
0.5	979.104
1.0	979.104
1.5	978.600
2.0	978.095
2.5	976.581
3.0	975.067
3.5	973.553
4.0	971.534
4.5	969.011
5.0	966.487
5.5	963.964
6.0	961.440
6.5	958.412
7.0	955.384
7.5	952.356
8.0	948.823
8.5	945.290
9.0	941.252
9.5	937.215
10.0	932.673
10.5	927.626
11.0	922.579
11.5	917.027
12.0	911.476
12.5	904.914
13.0	898.353
13.5	891.288
14.0	883.717
14.5	875.642
15.0	867.063
15.5	857.473
16.0	847.884
16.5	837.286
17.0	825.678
17.5	814.070
18.0	800.948
18.5	787.321
19.0	772.180
19.5	756.030
20.0	739.375
20.5	721.206
21.0	702.533
21.5	682.345
22.0	661.148
22.5	639.446
23.0	616.735
23.5	593.519
24.0	569.798
24.5	545.573
25.0	520.843
25.5	496.366
26.0	471.585
26.5	447.057

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CANDELA TABULATION - (Cont.)

27.0	422.882
27.5	399.212
28.0	376.047
28.5	353.436
29.0	331.533
29.5	310.184
30.0	290.148
30.5	271.222
31.0	253.356
31.5	236.701
32.0	221.106
32.5	206.621
33.0	193.348
33.5	181.185
34.0	170.132
34.5	160.038
35.0	150.853
35.5	142.525
36.0	135.005
36.5	128.293
37.0	122.237
37.5	116.836
38.0	111.991
38.5	107.601
39.0	103.664
39.5	100.131
40.0	96.901
40.5	94.024
41.0	91.400
41.5	88.977
42.0	86.757
42.5	84.687
43.0	82.820
43.5	81.104
44.0	79.489
44.5	77.975
45.0	76.511
45.5	75.149
46.0	73.837
46.5	72.575
47.0	71.364
47.5	70.152
48.0	68.992
48.5	67.831
49.0	66.670
49.5	65.560
50.0	64.500
50.5	63.440
51.0	62.330
51.5	61.320
52.0	60.260
52.5	59.251
53.0	58.242
53.5	57.232
54.0	56.223
54.5	55.213

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CANDELA TABULATION - (Cont.)

55.0	54.204
55.5	53.195
56.0	52.236
56.5	51.176
57.0	50.217
57.5	49.208
58.0	48.198
58.5	47.189
59.0	46.179
59.5	45.170
60.0	44.161
60.5	43.151
61.0	42.142
61.5	41.082
62.0	40.123
62.5	39.114
63.0	38.054
63.5	37.044
64.0	36.035
64.5	35.076
65.0	34.117
65.5	33.158
66.0	32.199
66.5	31.291
67.0	30.332
67.5	29.474
68.0	28.566
68.5	27.708
69.0	26.850
69.5	25.941
70.0	25.083
70.5	24.225
71.0	23.418
71.5	22.560
72.0	21.702
72.5	20.894
73.0	20.036
73.5	19.229
74.0	18.472
74.5	17.664
75.0	16.857
75.5	16.100
76.0	15.343
76.5	14.586
77.0	13.879
77.5	13.122
78.0	12.415
78.5	11.709
79.0	11.002
79.5	10.296
80.0	9.640
80.5	8.933
81.0	8.277
81.5	7.621
82.0	6.965
82.5	6.309

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CANDELA TABULATION - (Cont.)

83.0	5.703
83.5	5.047
84.0	4.441
84.5	3.785
85.0	3.180
85.5	2.523
86.0	1.867
86.5	1.413
87.0	1.009
87.5	0.606
88.0	0.404
88.5	0.303
89.0	0.202
89.5	0.151
90.0	0.000
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
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127.5	0.000
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129.0	0.000
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130.0	0.000
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131.5	0.000
132.0	0.000
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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
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153.0	0.000
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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	331.18	N.A.	39.90
0-30	564.62	N.A.	68.00
0-40	666.04	N.A.	80.20
0-60	774.44	N.A.	93.30
0-80	826.33	N.A.	99.50
0-90	830.33	N.A.	100.00
10-90	739.12	N.A.	89.00
20-40	334.85	N.A.	40.30
20-50	394.78	N.A.	47.50
40-70	142.33	N.A.	17.10
60-80	51.89	N.A.	6.20
70-80	17.97	N.A.	2.20
80-90	4.00	N.A.	0.50
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	830.33	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	91.21
10-20	239.98
20-30	233.43
30-40	101.42
40-50	59.93
50-60	48.48
60-70	33.92
70-80	17.97
80-90	4.00
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

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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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76
4	94	86	80	75	93	85	79	75	83	78	74	81	76	73	79	75	72	70
5	89	80	74	69	88	79	73	69	77	72	68	76	71	68	74	70	67	65
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	63	61
7	81	71	64	60	79	70	64	60	69	63	59	67	63	59	66	62	59	57
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51
10	70	60	54	50	69	59	54	50	58	53	49	58	53	49	57	52	49	48

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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

X=2H	Y=2H	20.1	21.2	20.4	21.6	21.9	20.1	21.2	20.4	21.6	21.9
	3H	21.6	22.6	22.0	22.9	23.3	21.6	22.6	22.0	22.9	23.3
	4H	22.1	23.1	22.5	23.4	23.8	22.1	23.1	22.5	23.4	23.8
	6H	22.4	23.3	22.8	23.7	24.1	22.4	23.3	22.8	23.7	24.1
	8H	22.5	23.4	22.9	23.8	24.2	22.5	23.4	22.9	23.8	24.2
	12H	22.5	23.4	23.0	23.7	24.2	22.5	23.4	23.0	23.7	24.2

UGR Viewed Endwise

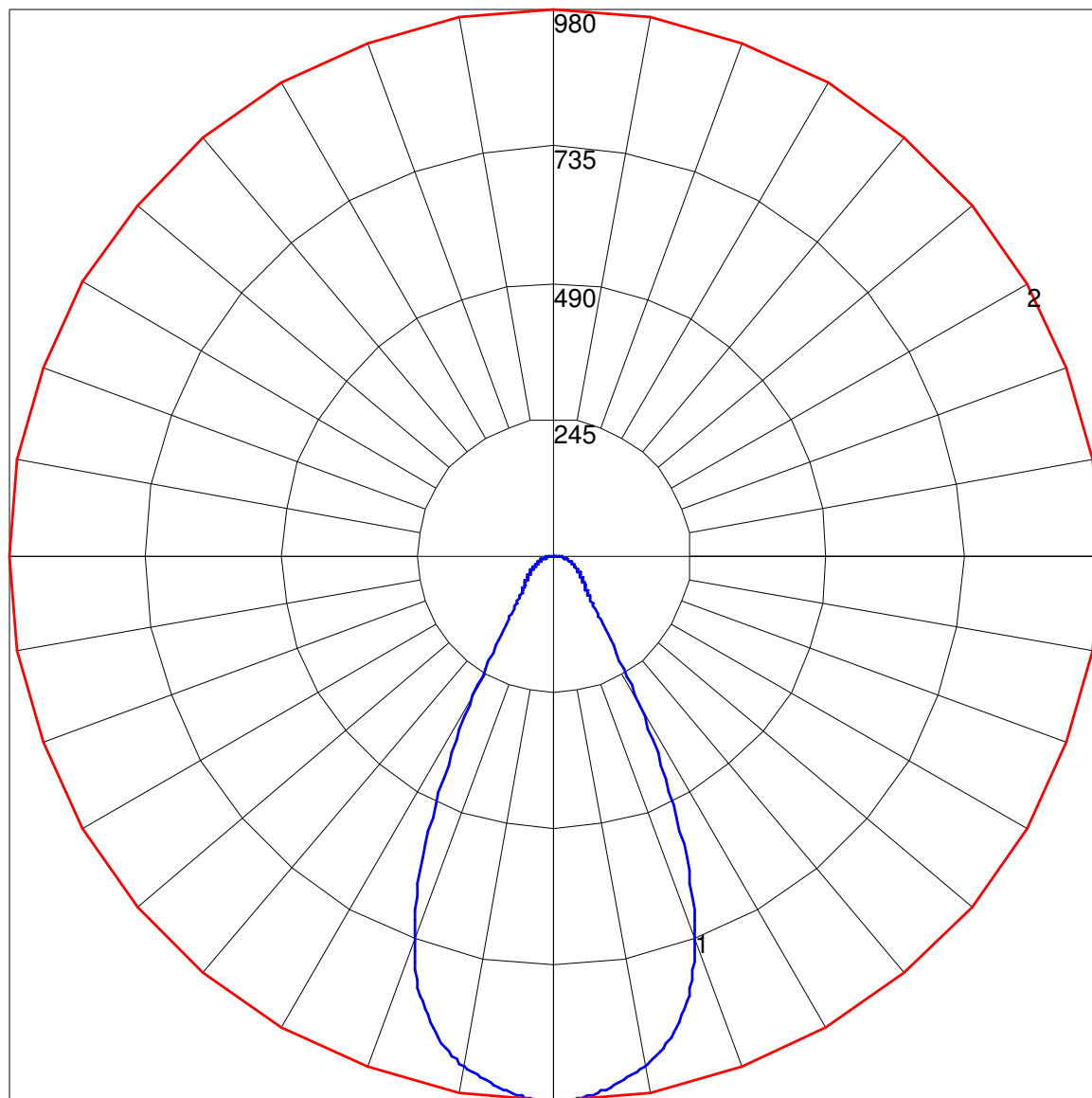
4H	2H	20.6	21.5	21.0	21.9	22.3	20.6	21.5	21.0	21.9	22.3
	3H	22.2	23.0	22.6	23.4	23.8	22.2	23.0	22.6	23.4	23.8
	4H	22.9	23.6	23.3	24.0	24.5	22.9	23.6	23.3	24.0	24.5
	6H	23.3	23.9	23.8	24.4	24.9	23.3	23.9	23.8	24.4	24.9
	8H	23.4	24.0	23.9	24.5	24.9	23.4	24.0	23.9	24.5	24.9
	12H	23.5	24.0	24.0	24.5	25.0	23.5	24.0	24.0	24.5	25.0

8H	4H	23.1	23.6	23.5	24.1	24.6	23.1	23.6	23.5	24.1	24.6
	6H	23.6	24.1	24.1	24.6	25.1	23.6	24.1	24.1	24.6	25.1
	8H	23.8	24.2	24.3	24.7	25.2	23.8	24.2	24.3	24.7	25.2
	12H	23.9	24.3	24.4	24.8	25.3	23.9	24.3	24.4	24.8	25.3

12H	4H	23.0	23.6	23.5	24.0	24.5	23.0	23.6	23.5	24.0	24.5
	6H	23.6	24.1	24.2	24.5	25.1	23.6	24.1	24.2	24.5	25.1
	8H	23.9	24.2	24.4	24.7	25.3	23.9	24.2	24.4	24.7	25.3

Maximum UGR = 25.3

POLAR GRAPH



Maximum Candela = 979.609 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.)