

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L8-850-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-L8-850-DIM-UNV-LW-OF_
[LUMINAIRE] Aluminum housing, optics, and trim enclosure
[LAMP] One white LED
[OTHER] This test was performed using the calibrated photodetector method 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	839
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	34583	34583	34583
55	30204	30204	30204
65	25802	25802	25802
75	20817	20817	20817
85	11660	11660	11660

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CANDELA TABULATION

	<u>0</u>
0.0	989.308
0.5	988.799
1.0	988.799
1.5	988.289
2.0	987.779
2.5	986.250
3.0	984.721
3.5	983.192
4.0	981.153
4.5	978.605
5.0	976.056
5.5	973.508
6.0	970.959
6.5	967.901
7.0	964.843
7.5	961.785
8.0	958.217
8.5	954.649
9.0	950.572
9.5	946.494
10.0	941.907
10.5	936.810
11.0	931.713
11.5	926.107
12.0	920.500
12.5	913.874
13.0	907.248
13.5	900.113
14.0	892.467
14.5	884.312
15.0	875.647
15.5	865.963
16.0	856.279
16.5	845.576
17.0	833.853
17.5	822.130
18.0	808.878
18.5	795.116
19.0	779.826
19.5	763.516
20.0	746.696
20.5	728.347
21.0	709.488
21.5	689.101
22.0	667.694
22.5	645.777
23.0	622.841
23.5	599.395
24.0	575.440
24.5	550.975
25.0	526.000
25.5	501.280
26.0	476.254
26.5	451.483

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CANDELA TABULATION - (Cont.)

27.0	427.069
27.5	403.165
28.0	379.770
28.5	356.936
29.0	334.815
29.5	313.255
30.0	293.021
30.5	273.907
31.0	255.864
31.5	239.045
32.0	223.295
32.5	208.667
33.0	195.262
33.5	182.979
34.0	171.816
34.5	161.623
35.0	152.346
35.5	143.936
36.0	136.342
36.5	129.563
37.0	123.447
37.5	117.993
38.0	113.100
38.5	108.666
39.0	104.690
39.5	101.122
40.0	97.860
40.5	94.955
41.0	92.305
41.5	89.858
42.0	87.616
42.5	85.526
43.0	83.640
43.5	81.907
44.0	80.276
44.5	78.747
45.0	77.269
45.5	75.893
46.0	74.568
46.5	73.293
47.0	72.070
47.5	70.847
48.0	69.675
48.5	68.502
49.0	67.330
49.5	66.209
50.0	65.138
50.5	64.068
51.0	62.947
51.5	61.927
52.0	60.857
52.5	59.838
53.0	58.818
53.5	57.799
54.0	56.779
54.5	55.760

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CANDELA TABULATION - (Cont.)

55.0	54.741
55.5	53.721
56.0	52.753
56.5	51.683
57.0	50.714
57.5	49.695
58.0	48.675
58.5	47.656
59.0	46.637
59.5	45.617
60.0	44.598
60.5	43.578
61.0	42.559
61.5	41.489
62.0	40.520
62.5	39.501
63.0	38.431
63.5	37.411
64.0	36.392
64.5	35.423
65.0	34.455
65.5	33.487
66.0	32.518
66.5	31.601
67.0	30.632
67.5	29.766
68.0	28.848
68.5	27.982
69.0	27.116
69.5	26.198
70.0	25.332
70.5	24.465
71.0	23.650
71.5	22.783
72.0	21.917
72.5	21.101
73.0	20.235
73.5	19.419
74.0	18.655
74.5	17.839
75.0	17.024
75.5	16.259
76.0	15.495
76.5	14.730
77.0	14.016
77.5	13.252
78.0	12.538
78.5	11.825
79.0	11.111
79.5	10.398
80.0	9.735
80.5	9.022
81.0	8.359
81.5	7.696
82.0	7.034
82.5	6.371

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CANDELA TABULATION - (Cont.)

83.0	5.759
83.5	5.097
84.0	4.485
84.5	3.823
85.0	3.211
85.5	2.548
86.0	1.886
86.5	1.427
87.0	1.019
87.5	0.612
88.0	0.408
88.5	0.306
89.0	0.204
89.5	0.153
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
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
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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	334.46	N.A.	39.90
0-30	570.21	N.A.	68.00
0-40	672.63	N.A.	80.20
0-60	782.11	N.A.	93.30
0-80	834.51	N.A.	99.50
0-90	838.55	N.A.	100.00
10-90	746.44	N.A.	89.00
20-40	338.17	N.A.	40.30
20-50	398.69	N.A.	47.50
40-70	143.74	N.A.	17.10
60-80	52.40	N.A.	6.20
70-80	18.14	N.A.	2.20
80-90	4.04	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	838.55	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	92.11
10-20	242.35
20-30	235.75
30-40	102.42
40-50	60.52
50-60	48.96
60-70	34.26
70-80	18.14
80-90	4.04
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	97	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	62	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	62	57	53	62	56	52	61	56	52	60	55	52	51
10	70	60	54	50	69	59	53	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	21.3	20.4	21.6	21.9	20.1	21.3	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

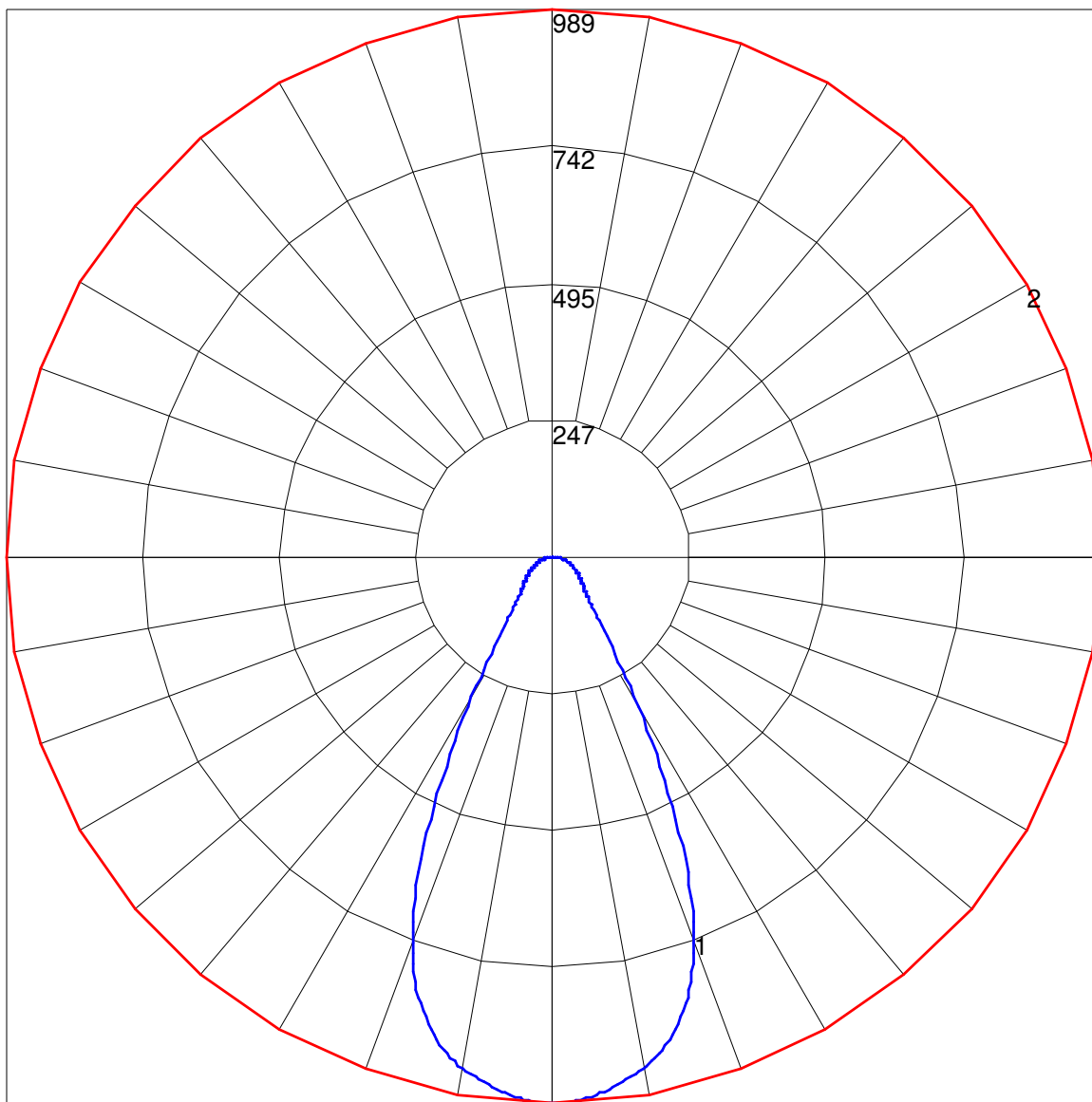
4H	2H	20.6	21.5	21.0	21.9	22.3	20.6	21.5	21.0	21.9	22.3
	3H	22.2	23.0	22.7	23.4	23.9	22.2	23.0	22.7	23.4	23.9
	4H	22.9	23.6	23.3	24.0	24.5	22.9	23.6	23.3	24.0	24.5
	6H	23.3	23.9	23.8	24.4	24.9	23.3	23.9	23.8	24.4	24.9
	8H	23.4	24.0	23.9	24.5	24.9	23.4	24.0	23.9	24.5	24.9
	12H	23.5	24.0	24.0	24.5	25.0	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 = 989.308 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.)