

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-850-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-L5-850-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	515
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	77
Total Luminaire Watts	6.7
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	21247	21247	21247
55	18556	18556	18556
65	15852	15852	15852
75	12789	12789	12789
85	7164	7164	7164

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CANDELA TABULATION

	<u>0</u>
0.0	607.787
0.5	607.474
1.0	607.474
1.5	607.160
2.0	606.847
2.5	605.908
3.0	604.969
3.5	604.029
4.0	602.777
4.5	601.211
5.0	599.645
5.5	598.080
6.0	596.514
6.5	594.635
7.0	592.756
7.5	590.878
8.0	588.686
8.5	586.494
9.0	583.989
9.5	581.484
10.0	578.666
10.5	575.534
11.0	572.403
11.5	568.958
12.0	565.514
12.5	561.443
13.0	557.373
13.5	552.989
14.0	548.292
14.5	543.282
15.0	537.959
15.5	532.009
16.0	526.060
16.5	519.484
17.0	512.282
17.5	505.080
18.0	496.938
18.5	488.484
19.0	479.090
19.5	469.070
20.0	458.736
20.5	447.464
21.0	435.878
21.5	423.353
22.0	410.201
22.5	396.737
23.0	382.646
23.5	368.242
24.0	353.525
24.5	338.494
25.0	323.151
25.5	307.964
26.0	292.589
26.5	277.371

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CANDELA TABULATION - (Cont.)

27.0	262.372
27.5	247.686
28.0	233.314
28.5	219.285
29.0	205.696
29.5	192.450
30.0	180.019
30.5	168.276
31.0	157.192
31.5	146.858
32.0	137.183
32.5	128.196
33.0	119.960
33.5	112.414
34.0	105.556
34.5	99.294
35.0	93.595
35.5	88.428
36.0	83.762
36.5	79.598
37.0	75.840
37.5	72.490
38.0	69.484
38.5	66.759
39.0	64.317
39.5	62.125
40.0	60.121
40.5	58.336
41.0	56.708
41.5	55.205
42.0	53.827
42.5	52.543
43.0	51.385
43.5	50.320
44.0	49.318
44.5	48.379
45.0	47.471
45.5	46.625
46.0	45.811
46.5	45.028
47.0	44.277
47.5	43.525
48.0	42.805
48.5	42.085
49.0	41.365
49.5	40.676
50.0	40.018
50.5	39.361
51.0	38.672
51.5	38.045
52.0	37.388
52.5	36.762
53.0	36.135
53.5	35.509
54.0	34.883
54.5	34.256

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CANDELA TABULATION - (Cont.)

55.0	33.630
55.5	33.004
56.0	32.409
56.5	31.751
57.0	31.157
57.5	30.530
58.0	29.904
58.5	29.278
59.0	28.651
59.5	28.025
60.0	27.399
60.5	26.773
61.0	26.146
61.5	25.489
62.0	24.894
62.5	24.268
63.0	23.610
63.5	22.984
64.0	22.358
64.5	21.763
65.0	21.168
65.5	20.573
66.0	19.978
66.5	19.414
67.0	18.819
67.5	18.287
68.0	17.723
68.5	17.191
69.0	16.659
69.5	16.095
70.0	15.563
70.5	15.030
71.0	14.529
71.5	13.997
72.0	13.465
72.5	12.964
73.0	12.431
73.5	11.930
74.0	11.461
74.5	10.960
75.0	10.459
75.5	9.989
76.0	9.519
76.5	9.049
77.0	8.611
77.5	8.141
78.0	7.703
78.5	7.265
79.0	6.826
79.5	6.388
80.0	5.981
80.5	5.542
81.0	5.135
81.5	4.728
82.0	4.321
82.5	3.914

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CANDELA TABULATION - (Cont.)

83.0	3.538
83.5	3.131
84.0	2.756
84.5	2.348
85.0	1.973
85.5	1.566
86.0	1.159
86.5	0.877
87.0	0.626
87.5	0.376
88.0	0.251
88.5	0.188
89.0	0.125
89.5	0.094
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
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120.5	0.000
121.0	0.000
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
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124.0	0.000
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125.0	0.000
125.5	0.000
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126.5	0.000
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128.0	0.000
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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
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145.0	0.000
145.5	0.000
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146.5	0.000
147.0	0.000
147.5	0.000
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148.5	0.000
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150.0	0.000
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151.0	0.000
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152.0	0.000
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154.5	0.000
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160.0	0.000
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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	205.48	N.A.	39.90
0-30	350.31	N.A.	68.00
0-40	413.23	N.A.	80.20
0-60	480.49	N.A.	93.30
0-80	512.69	N.A.	99.50
0-90	515.17	N.A.	100.00
10-90	458.58	N.A.	89.00
20-40	207.75	N.A.	40.30
20-50	244.94	N.A.	47.50
40-70	88.31	N.A.	17.10
60-80	32.19	N.A.	6.20
70-80	11.15	N.A.	2.20
80-90	2.48	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	515.17	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	56.59
10-20	148.89
20-30	144.83
30-40	62.92
40-50	37.18
50-60	30.08
60-70	21.05
70-80	11.15
80-90	2.48
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

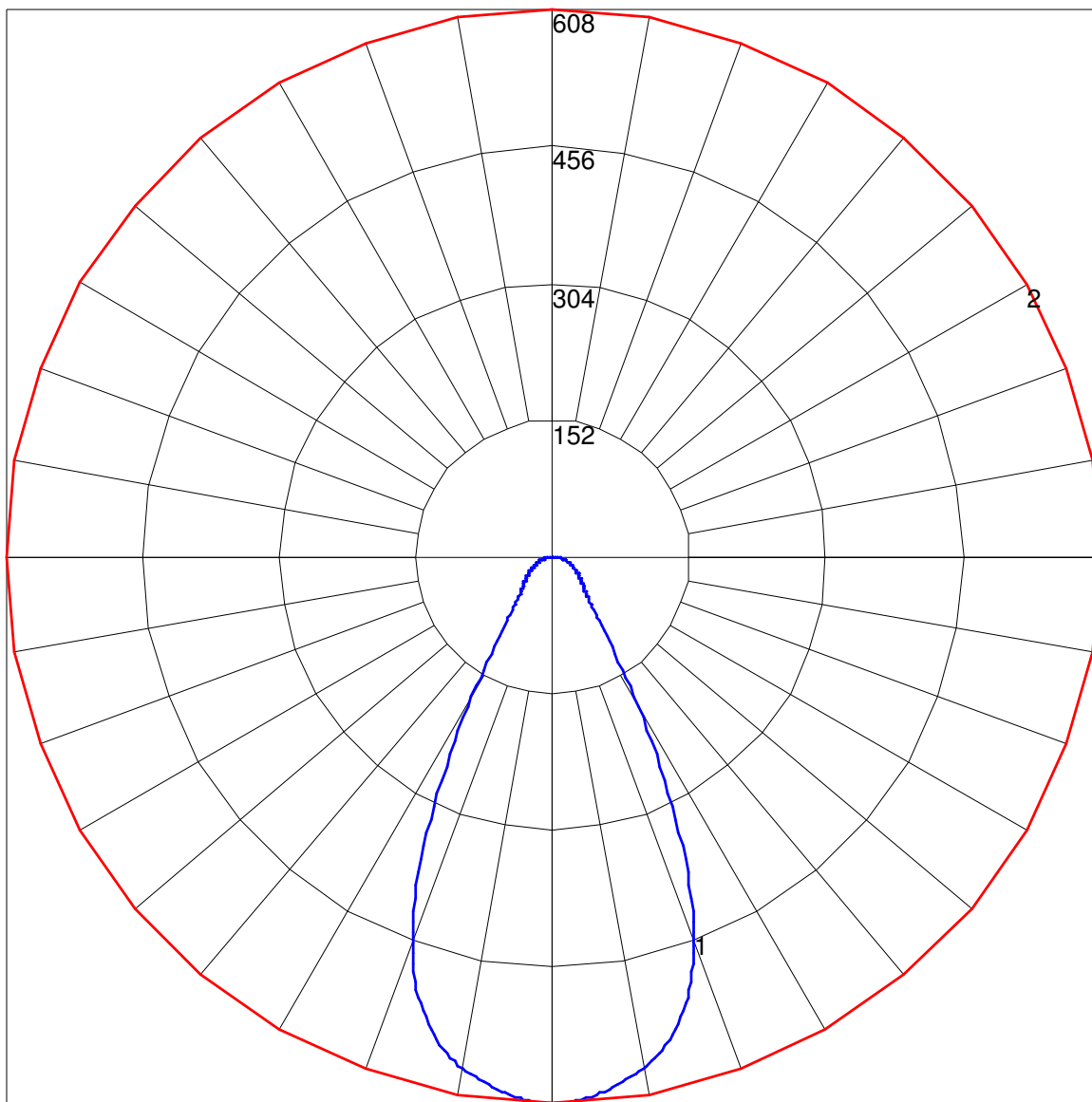
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	18.4	19.6	18.7	19.9	20.2	18.4	19.6	18.7	19.9	20.2
	3H	19.9	20.9	20.3	21.3	21.6	19.9	20.9	20.3	21.3	21.6
	4H	20.4	21.4	20.8	21.7	22.1	20.4	21.4	20.8	21.7	22.1
	6H	20.7	21.6	21.1	22.0	22.4	20.7	21.6	21.1	22.0	22.4
	8H	20.8	21.7	21.3	22.1	22.5	20.8	21.7	21.3	22.1	22.5
	12H	20.9	21.7	21.3	22.0	22.5	20.9	21.7	21.3	22.0	22.5
4H	2H	18.9	19.8	19.3	20.2	20.6	18.9	19.8	19.3	20.2	20.6
	3H	20.5	21.3	21.0	21.7	22.2	20.5	21.3	21.0	21.7	22.2
	4H	21.2	21.9	21.6	22.3	22.8	21.2	21.9	21.6	22.3	22.8
	6H	21.6	22.2	22.1	22.7	23.2	21.6	22.2	22.1	22.7	23.2
	8H	21.7	22.3	22.2	22.8	23.2	21.7	22.3	22.2	22.8	23.2
	12H	21.8	22.3	22.3	22.8	23.3	21.8	22.3	22.3	22.8	23.3
8H	4H	21.4	21.9	21.8	22.4	22.9	21.4	21.9	21.8	22.4	22.9
	6H	21.9	22.4	22.4	22.9	23.4	21.9	22.4	22.4	22.9	23.4
	8H	22.1	22.5	22.6	23.0	23.5	22.1	22.5	22.6	23.0	23.5
	12H	22.2	22.6	22.7	23.1	23.6	22.2	22.6	22.7	23.1	23.6
12H	4H	21.4	21.9	21.8	22.3	22.8	21.4	21.9	21.8	22.3	22.8
	6H	21.9	22.4	22.5	22.8	23.4	21.9	22.4	22.5	22.8	23.4
	8H	22.2	22.5	22.7	23.0	23.6	22.2	22.5	22.7	23.0	23.6

Maximum UGR = 23.6

POLAR GRAPH



Maximum Candela = 607.787 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.)