

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-940-DIM-UNV-LW-OF_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 13257153.01
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 2025-05-20
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] V2DR-L5-940-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	424
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	63
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	17497	17497	17497
55	15281	15281	15281
65	13054	13054	13054
75	10532	10532	10532
85	5901	5901	5901

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CANDELA TABULATION

	<u>0</u>
0.0	500.530
0.5	500.272
1.0	500.272
1.5	500.014
2.0	499.757
2.5	498.983
3.0	498.209
3.5	497.436
4.0	496.404
4.5	495.115
5.0	493.825
5.5	492.536
6.0	491.247
6.5	489.700
7.0	488.152
7.5	486.605
8.0	484.800
8.5	482.995
9.0	480.932
9.5	478.869
10.0	476.548
10.5	473.969
11.0	471.391
11.5	468.554
12.0	465.717
12.5	462.365
13.0	459.013
13.5	455.403
14.0	451.534
14.5	447.408
15.0	443.025
15.5	438.125
16.0	433.225
16.5	427.810
17.0	421.879
17.5	415.948
18.0	409.243
18.5	402.281
19.0	394.545
19.5	386.293
20.0	377.783
20.5	368.500
21.0	358.958
21.5	348.643
22.0	337.813
22.5	326.724
23.0	315.120
23.5	303.258
24.0	291.138
24.5	278.760
25.0	266.124
25.5	253.617
26.0	240.956
26.5	228.423

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CANDELA TABULATION - (Cont.)

27.0	216.071
27.5	203.977
28.0	192.141
28.5	180.588
29.0	169.396
29.5	158.488
30.0	148.251
30.5	138.581
31.0	129.452
31.5	120.942
32.0	112.974
32.5	105.573
33.0	98.791
33.5	92.576
34.0	86.929
34.5	81.771
35.0	77.078
35.5	72.823
36.0	68.981
36.5	65.551
37.0	62.457
37.5	59.697
38.0	57.222
38.5	54.978
39.0	52.967
39.5	51.162
40.0	49.511
40.5	48.042
41.0	46.701
41.5	45.463
42.0	44.328
42.5	43.271
43.0	42.317
43.5	41.440
44.0	40.615
44.5	39.841
45.0	39.093
45.5	38.397
46.0	37.727
46.5	37.082
47.0	36.463
47.5	35.844
48.0	35.251
48.5	34.658
49.0	34.065
49.5	33.498
50.0	32.956
50.5	32.415
51.0	31.847
51.5	31.331
52.0	30.790
52.5	30.274
53.0	29.758
53.5	29.243
54.0	28.727
54.5	28.211

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CANDELA TABULATION - (Cont.)

55.0	27.695
55.5	27.180
56.0	26.690
56.5	26.148
57.0	25.658
57.5	25.143
58.0	24.627
58.5	24.111
59.0	23.595
59.5	23.080
60.0	22.564
60.5	22.048
61.0	21.532
61.5	20.991
62.0	20.501
62.5	19.985
63.0	19.444
63.5	18.928
64.0	18.412
64.5	17.922
65.0	17.432
65.5	16.942
66.0	16.452
66.5	15.988
67.0	15.498
67.5	15.060
68.0	14.596
68.5	14.157
69.0	13.719
69.5	13.255
70.0	12.816
70.5	12.378
71.0	11.965
71.5	11.527
72.0	11.089
72.5	10.676
73.0	10.238
73.5	9.825
74.0	9.438
74.5	9.026
75.0	8.613
75.5	8.226
76.0	7.839
76.5	7.453
77.0	7.091
77.5	6.705
78.0	6.344
78.5	5.983
79.0	5.622
79.5	5.261
80.0	4.925
80.5	4.564
81.0	4.229
81.5	3.894
82.0	3.559
82.5	3.223

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CANDELA TABULATION - (Cont.)

83.0	2.914
83.5	2.579
84.0	2.269
84.5	1.934
85.0	1.625
85.5	1.289
86.0	0.954
86.5	0.722
87.0	0.516
87.5	0.309
88.0	0.206
88.5	0.155
89.0	0.103
89.5	0.077
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
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122.5	0.000
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124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
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127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
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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
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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
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154.5	0.000
155.0	0.000
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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	169.22	N.A.	39.90
0-30	288.49	N.A.	68.00
0-40	340.31	N.A.	80.20
0-60	395.70	N.A.	93.30
0-80	422.21	N.A.	99.50
0-90	424.26	N.A.	100.00
10-90	377.65	N.A.	89.00
20-40	171.09	N.A.	40.30
20-50	201.71	N.A.	47.50
40-70	72.72	N.A.	17.10
60-80	26.51	N.A.	6.20
70-80	9.18	N.A.	2.20
80-90	2.04	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	424.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	46.60
10-20	122.62
20-30	119.27
30-40	51.82
40-50	30.62
50-60	24.77
60-70	17.33
70-80	9.18
80-90	2.04
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	113	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	95	86	80	75	93	85	79	75	83	78	74	81	76	73	79	75	72	71
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	60	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

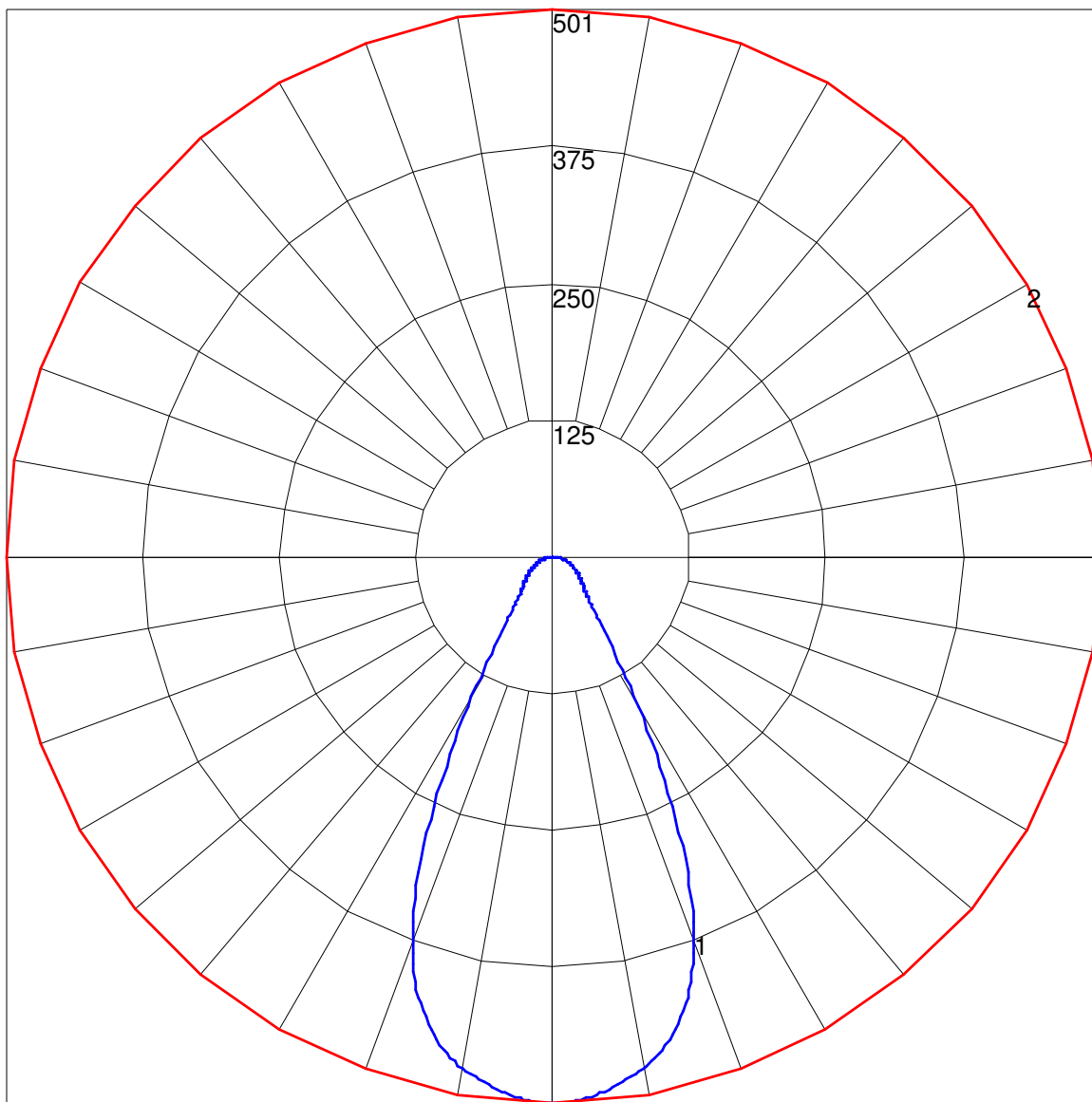
Reflectances

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	17.8	18.9	18.1	19.3	19.6	17.8	18.9	18.1	19.3	19.6
	3H	19.3	20.3	19.7	20.6	21.0	19.3	20.3	19.7	20.6	21.0
	4H	19.8	20.8	20.2	21.1	21.5	19.8	20.8	20.2	21.1	21.5
	6H	20.1	21.0	20.5	21.4	21.8	20.1	21.0	20.5	21.4	21.8
	8H	20.2	21.1	20.6	21.4	21.9	20.2	21.1	20.6	21.4	21.9
	12H	20.2	21.0	20.7	21.4	21.9	20.2	21.0	20.7	21.4	21.9
4H	2H	18.2	19.2	18.7	19.6	19.9	18.2	19.2	18.7	19.6	19.9
	3H	19.9	20.7	20.3	21.1	21.5	19.9	20.7	20.3	21.1	21.5
	4H	20.6	21.3	21.0	21.7	22.1	20.6	21.3	21.0	21.7	22.1
	6H	21.0	21.6	21.5	22.1	22.6	21.0	21.6	21.5	22.1	22.6
	8H	21.1	21.7	21.6	22.2	22.6	21.1	21.7	21.6	22.2	22.6
	12H	21.2	21.7	21.7	22.2	22.7	21.2	21.7	21.7	22.2	22.7
8H	4H	20.8	21.3	21.2	21.8	22.2	20.8	21.3	21.2	21.8	22.2
	6H	21.3	21.8	21.8	22.3	22.8	21.3	21.8	21.8	22.3	22.8
	8H	21.5	21.9	22.0	22.4	22.9	21.5	21.9	22.0	22.4	22.9
	12H	21.6	22.0	22.1	22.5	23.0	21.6	22.0	22.1	22.5	23.0
12H	4H	20.7	21.2	21.2	21.7	22.2	20.7	21.2	21.2	21.7	22.2
	6H	21.3	21.8	21.9	22.2	22.8	21.3	21.8	21.9	22.2	22.8
	8H	21.6	21.9	22.1	22.4	23.0	21.6	21.9	22.1	22.4	23.0

Maximum UGR = 23.0

POLAR GRAPH



Maximum Candela = 500.53 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.)