

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-830-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-L5-830-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	495
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	74
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	20413	20413	20413
55	17828	17828	17828
65	15230	15230	15230
75	12287	12287	12287
85	6881	6881	6881

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CANDELA TABULATION

	<u>0</u>
0.0	583.952
0.5	583.651
1.0	583.651
1.5	583.350
2.0	583.049
2.5	582.147
3.0	581.244
3.5	580.342
4.0	579.138
4.5	577.634
5.0	576.130
5.5	574.626
6.0	573.121
6.5	571.316
7.0	569.511
7.5	567.706
8.0	565.600
8.5	563.494
9.0	561.087
9.5	558.681
10.0	555.973
10.5	552.964
11.0	549.956
11.5	546.646
12.0	543.337
12.5	539.426
13.0	535.515
13.5	531.303
14.0	526.790
14.5	521.977
15.0	516.862
15.5	511.146
16.0	505.430
16.5	499.112
17.0	492.192
17.5	485.273
18.0	477.451
18.5	469.328
19.0	460.302
19.5	450.675
20.0	440.747
20.5	429.916
21.0	418.785
21.5	406.751
22.0	394.115
22.5	381.178
23.0	367.640
23.5	353.801
24.0	339.661
24.5	325.220
25.0	310.478
25.5	295.887
26.0	281.115
26.5	266.494

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CANDELA TABULATION - (Cont.)

27.0	252.083
27.5	237.973
28.0	224.164
28.5	210.686
29.0	197.629
29.5	184.903
30.0	172.959
30.5	161.677
31.0	151.027
31.5	141.099
32.0	131.803
32.5	123.168
33.0	115.256
33.5	108.006
34.0	101.417
34.5	95.400
35.0	89.924
35.5	84.960
36.0	80.478
36.5	76.476
37.0	72.866
37.5	69.647
38.0	66.759
38.5	64.141
39.0	61.795
39.5	59.689
40.0	57.763
40.5	56.049
41.0	54.484
41.5	53.040
42.0	51.716
42.5	50.483
43.0	49.370
43.5	48.347
44.0	47.384
44.5	46.481
45.0	45.609
45.5	44.797
46.0	44.015
46.5	43.262
47.0	42.540
47.5	41.818
48.0	41.126
48.5	40.434
49.0	39.742
49.5	39.081
50.0	38.449
50.5	37.817
51.0	37.155
51.5	36.553
52.0	35.922
52.5	35.320
53.0	34.718
53.5	34.117
54.0	33.515
54.5	32.913

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CANDELA TABULATION - (Cont.)

55.0	32.311
55.5	31.710
56.0	31.138
56.5	30.506
57.0	29.935
57.5	29.333
58.0	28.731
58.5	28.130
59.0	27.528
59.5	26.926
60.0	26.324
60.5	25.723
61.0	25.121
61.5	24.489
62.0	23.918
62.5	23.316
63.0	22.684
63.5	22.082
64.0	21.481
64.5	20.909
65.0	20.338
65.5	19.766
66.0	19.194
66.5	18.653
67.0	18.081
67.5	17.570
68.0	17.028
68.5	16.517
69.0	16.005
69.5	15.464
70.0	14.952
70.5	14.441
71.0	13.959
71.5	13.448
72.0	12.937
72.5	12.455
73.0	11.944
73.5	11.462
74.0	11.011
74.5	10.530
75.0	10.048
75.5	9.597
76.0	9.146
76.5	8.695
77.0	8.273
77.5	7.822
78.0	7.401
78.5	6.980
79.0	6.559
79.5	6.137
80.0	5.746
80.5	5.325
81.0	4.934
81.5	4.543
82.0	4.152
82.5	3.761

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CANDELA TABULATION - (Cont.)

83.0	3.400
83.5	3.009
84.0	2.647
84.5	2.256
85.0	1.895
85.5	1.504
86.0	1.113
86.5	0.842
87.0	0.602
87.5	0.361
88.0	0.241
88.5	0.181
89.0	0.120
89.5	0.090
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
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130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
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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
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

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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	197.42	N.A.	39.90
0-30	336.57	N.A.	68.00
0-40	397.03	N.A.	80.20
0-60	461.65	N.A.	93.30
0-80	492.58	N.A.	99.50
0-90	494.96	N.A.	100.00
10-90	440.60	N.A.	89.00
20-40	199.61	N.A.	40.30
20-50	235.33	N.A.	47.50
40-70	84.84	N.A.	17.10
60-80	30.93	N.A.	6.20
70-80	10.71	N.A.	2.20
80-90	2.38	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	494.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	54.37
10-20	143.05
20-30	139.15
30-40	60.46
40-50	35.72
50-60	28.90
60-70	20.22
70-80	10.71
80-90	2.38
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	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

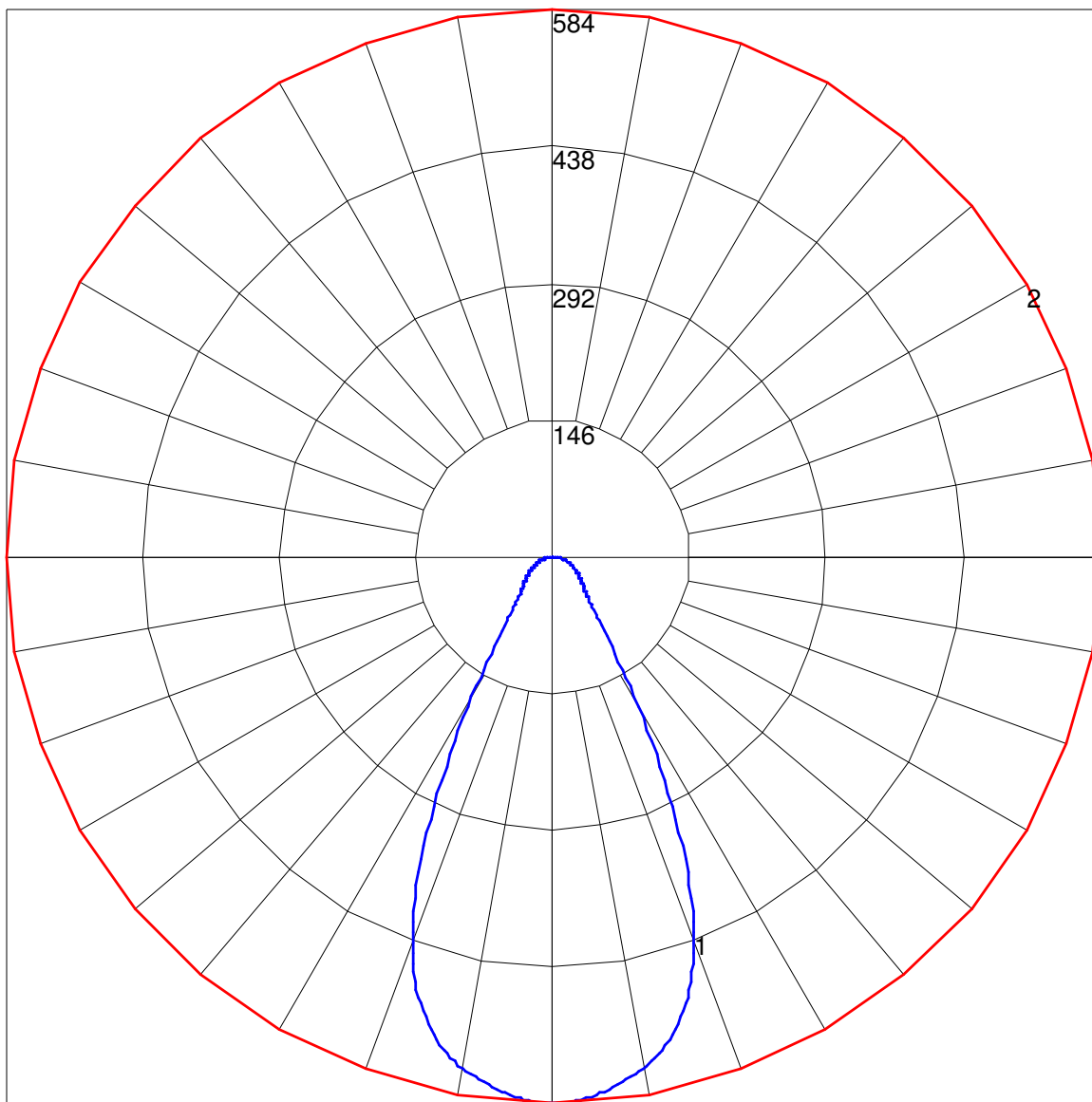
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	18.3	19.4	18.6	19.8	20.1	18.3	19.4	18.6	19.8	20.1
	3H	19.8	20.8	20.2	21.1	21.5	19.8	20.8	20.2	21.1	21.5
	4H	20.3	21.3	20.7	21.6	22.0	20.3	21.3	20.7	21.6	22.0
	6H	20.6	21.5	21.0	21.9	22.3	20.6	21.5	21.0	21.9	22.3
	8H	20.7	21.6	21.1	22.0	22.4	20.7	21.6	21.1	22.0	22.4
	12H	20.7	21.6	21.2	21.9	22.4	20.7	21.6	21.2	21.9	22.4
4H	2H	18.8	19.7	19.2	20.1	20.5	18.8	19.7	19.2	20.1	20.5
	3H	20.4	21.2	20.8	21.6	22.0	20.4	21.2	20.8	21.6	22.0
	4H	21.1	21.8	21.5	22.2	22.7	21.1	21.8	21.5	22.2	22.7
	6H	21.5	22.1	22.0	22.6	23.1	21.5	22.1	22.0	22.6	23.1
	8H	21.6	22.2	22.1	22.7	23.1	21.6	22.2	22.1	22.7	23.1
	12H	21.7	22.2	22.2	22.7	23.2	21.7	22.2	22.2	22.7	23.2
8H	4H	21.3	21.8	21.7	22.3	22.8	21.3	21.8	21.7	22.3	22.8
	6H	21.8	22.3	22.3	22.8	23.3	21.8	22.3	22.3	22.8	23.3
	8H	22.0	22.4	22.5	22.9	23.4	22.0	22.4	22.5	22.9	23.4
	12H	22.1	22.5	22.6	23.0	23.5	22.1	22.5	22.6	23.0	23.5
12H	4H	21.2	21.8	21.7	22.2	22.7	21.2	21.8	21.7	22.2	22.7
	6H	21.8	22.3	22.4	22.7	23.3	21.8	22.3	22.4	22.7	23.3
	8H	22.1	22.4	22.6	22.9	23.5	22.1	22.4	22.6	22.9	23.5

Maximum UGR = 23.5

POLAR GRAPH



Maximum Candela = 583.952 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.)