

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-830-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-L18-830-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	1769
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	74
Total Luminaire Watts	23.9
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	72962	72962	72962
55	63723	63723	63723
65	54436	54436	54436
75	43918	43918	43918
85	24601	24601	24601

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CANDELA TABULATION

	<u>0</u>
0.0	2087.194
0.5	2086.119
1.0	2086.119
1.5	2085.044
2.0	2083.968
2.5	2080.742
3.0	2077.516
3.5	2074.290
4.0	2069.989
4.5	2064.613
5.0	2059.236
5.5	2053.859
6.0	2048.483
6.5	2042.031
7.0	2035.579
7.5	2029.127
8.0	2021.600
8.5	2014.073
9.0	2005.470
9.5	1996.867
10.0	1987.190
10.5	1976.436
11.0	1965.683
11.5	1953.855
12.0	1942.026
12.5	1928.047
13.0	1914.068
13.5	1899.013
14.0	1882.884
14.5	1865.679
15.0	1847.398
15.5	1826.967
16.0	1806.536
16.5	1783.954
17.0	1759.222
17.5	1734.490
18.0	1706.531
18.5	1677.498
19.0	1645.238
19.5	1610.828
20.0	1575.342
20.5	1536.631
21.0	1496.844
21.5	1453.831
22.0	1408.668
22.5	1362.429
23.0	1314.040
23.5	1264.575
24.0	1214.035
24.5	1162.420
25.0	1109.729
25.5	1057.576
26.0	1004.778
26.5	952.518

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CANDELA TABULATION - (Cont.)

27.0	901.010
27.5	850.577
28.0	801.220
28.5	753.046
29.0	706.377
29.5	660.891
30.0	618.201
30.5	577.876
31.0	539.810
31.5	504.325
32.0	471.097
32.5	440.236
33.0	411.955
33.5	386.040
34.0	362.490
34.5	340.984
35.0	321.413
35.5	303.670
36.0	287.648
36.5	273.346
37.0	260.442
37.5	248.936
38.0	238.613
38.5	229.258
39.0	220.871
39.5	213.343
40.0	206.461
40.5	200.332
41.0	194.740
41.5	189.579
42.0	184.847
42.5	180.439
43.0	176.460
43.5	172.804
44.0	169.363
44.5	166.137
45.0	163.018
45.5	160.115
46.0	157.319
46.5	154.631
47.0	152.050
47.5	149.469
48.0	146.996
48.5	144.523
49.0	142.050
49.5	139.684
50.0	137.426
50.5	135.168
51.0	132.802
51.5	130.651
52.0	128.393
52.5	126.242
53.0	124.092
53.5	121.941
54.0	119.791
54.5	117.640

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CANDELA TABULATION - (Cont.)

55.0	115.489
55.5	113.339
56.0	111.296
56.5	109.037
57.0	106.994
57.5	104.844
58.0	102.693
58.5	100.542
59.0	98.392
59.5	96.241
60.0	94.090
60.5	91.940
61.0	89.789
61.5	87.531
62.0	85.488
62.5	83.337
63.0	81.079
63.5	78.928
64.0	76.778
64.5	74.735
65.0	72.692
65.5	70.648
66.0	68.605
66.5	66.670
67.0	64.627
67.5	62.799
68.0	60.863
68.5	59.035
69.0	57.207
69.5	55.271
70.0	53.443
70.5	51.615
71.0	49.895
71.5	48.067
72.0	46.239
72.5	44.518
73.0	42.690
73.5	40.970
74.0	39.357
74.5	37.636
75.0	35.916
75.5	34.303
76.0	32.690
76.5	31.077
77.0	29.571
77.5	27.958
78.0	26.453
78.5	24.947
79.0	23.442
79.5	21.937
80.0	20.539
80.5	19.033
81.0	17.635
81.5	16.237
82.0	14.839
82.5	13.441

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CANDELA TABULATION - (Cont.)

83.0	12.151
83.5	10.753
84.0	9.463
84.5	8.065
85.0	6.775
85.5	5.377
86.0	3.979
86.5	3.011
87.0	2.151
87.5	1.290
88.0	0.860
88.5	0.645
89.0	0.430
89.5	0.323
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
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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
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145.0	0.000
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146.0	0.000
146.5	0.000
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151.0	0.000
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157.0	0.000
157.5	0.000
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158.5	0.000
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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	705.63	N.A.	39.90
0-30	1203.00	N.A.	68.00
0-40	1419.08	N.A.	80.20
0-60	1650.06	N.A.	93.30
0-80	1760.61	N.A.	99.50
0-90	1769.13	N.A.	100.00
10-90	1574.8	N.A.	89.00
20-40	713.45	N.A.	40.30
20-50	841.13	N.A.	47.50
40-70	303.25	N.A.	17.10
60-80	110.56	N.A.	6.20
70-80	38.28	N.A.	2.20
80-90	8.52	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	1769.13	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	194.33
10-20	511.31
20-30	497.36
30-40	216.09
40-50	127.68
50-60	103.29
60-70	72.28
70-80	38.28
80-90	8.52
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	22.7	23.8	23.0	24.2	24.5	UGR Viewed Endwise			
	3H	24.2	25.2	24.6	25.5	25.9	22.7	23.8	23.0	24.2
	4H	24.7	25.7	25.1	26.0	26.4	24.2	25.2	24.6	25.5
	6H	25.0	25.9	25.4	26.3	26.7	24.7	25.7	25.1	26.0
	8H	25.1	26.0	25.5	26.4	26.8	25.0	25.9	25.4	26.3
	12H	25.1	26.0	25.6	26.3	26.8	25.1	26.0	25.5	26.4

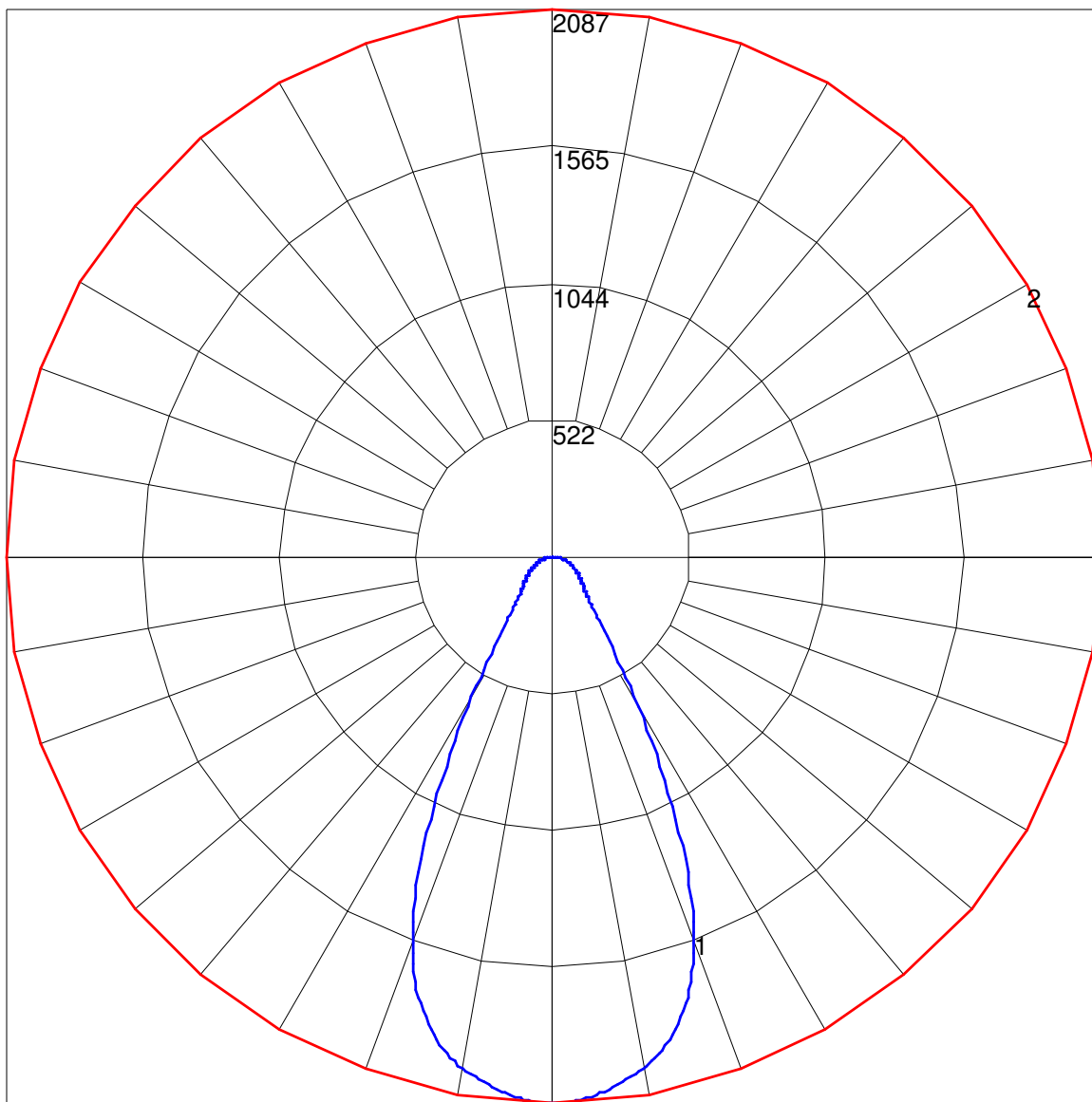
4H	2H	23.2	24.1	23.6	24.5	24.9	25.1	26.0	25.6	26.3
	3H	24.8	25.6	25.3	26.0	26.5	25.1	26.0	25.6	26.3
	4H	25.5	26.2	25.9	26.6	27.1	26.1	26.6	26.6	27.1
	6H	25.9	26.5	26.4	27.0	27.5	26.1	26.6	26.6	27.1
	8H	26.0	26.6	26.5	27.1	27.5	26.1	26.6	26.6	27.1
	12H	26.1	26.6	26.6	27.1	27.6	26.1	26.6	26.6	27.1

8H	4H	25.7	26.2	26.1	26.7	27.2	26.1	26.6	26.6	27.1
	6H	26.2	26.7	26.7	27.2	27.7	26.1	26.6	26.6	27.1
	8H	26.4	26.8	26.9	27.3	27.8	26.1	26.6	26.6	27.1
	12H	26.5	26.9	27.0	27.4	27.9	26.1	26.6	26.6	27.1

12H	4H	25.6	26.2	26.1	26.6	27.1	26.1	26.6	26.6	27.1
	6H	26.2	26.7	26.8	27.1	27.7	26.1	26.6	26.6	27.1
	8H	26.5	26.8	27.0	27.3	27.9	26.1	26.6	26.6	27.1

Maximum UGR = 27.9

POLAR GRAPH



Maximum Candela = 2087.194 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.)