

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-830-DIM-UNV-RW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 13257153.03
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 2025-05-20
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] V2DR-L18-830-DIM-UNV-RW-OF-WH_
[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
[SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1717
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	72
Total Luminaire Watts	23.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.88
Spacing Criterion (90-270)	0.88
Spacing Criterion (Diagonal)	0.80
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	61553	61553	61553
55	48707	48707	48707
65	36409	36409	36409
75	18957	18957	18957
85	11489	11489	11489

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CANDELA TABULATION

	<u>0</u>
0.0	2046.009
0.5	2046.009
1.0	2044.955
1.5	2043.900
2.0	2043.900
2.5	2041.791
3.0	2038.627
3.5	2034.408
4.0	2030.190
4.5	2025.971
5.0	2019.643
5.5	2014.370
6.0	2008.042
6.5	2000.660
7.0	1993.277
7.5	1985.895
8.0	1978.512
8.5	1970.075
9.0	1960.583
9.5	1952.146
10.0	1942.654
10.5	1932.108
11.0	1920.507
11.5	1908.906
12.0	1896.250
12.5	1883.594
13.0	1869.884
13.5	1855.119
14.0	1839.299
14.5	1823.479
15.0	1805.551
15.5	1787.622
16.0	1767.583
16.5	1747.545
17.0	1726.452
17.5	1704.305
18.0	1681.103
18.5	1655.791
19.0	1629.425
19.5	1600.950
20.0	1571.420
20.5	1540.835
21.0	1508.141
21.5	1474.392
22.0	1437.480
22.5	1400.567
23.0	1361.545
23.5	1321.469
24.0	1279.283
24.5	1237.097
25.0	1193.857
25.5	1148.507
26.0	1102.103
26.5	1055.699

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CANDELA TABULATION - (Cont.)

27.0	1009.611
27.5	963.312
28.0	916.591
28.5	870.081
29.0	822.517
29.5	774.636
30.0	727.177
30.5	680.456
31.0	634.368
31.5	589.862
32.0	547.044
32.5	506.546
33.0	469.000
33.5	434.197
34.0	401.819
34.5	372.184
35.0	345.290
35.5	320.612
36.0	298.253
36.5	278.215
37.0	260.392
37.5	244.466
38.0	230.018
38.5	217.151
39.0	205.867
39.5	195.953
40.0	187.094
40.5	179.395
41.0	172.540
41.5	166.423
42.0	160.939
42.5	156.087
43.0	151.658
43.5	147.756
44.0	144.064
44.5	140.690
45.0	137.526
45.5	134.467
46.0	131.620
46.5	128.772
47.0	126.135
47.5	123.499
48.0	120.862
48.5	118.331
49.0	115.800
49.5	113.269
50.0	110.843
50.5	108.523
51.0	106.097
51.5	103.777
52.0	101.562
52.5	99.242
53.0	97.027
53.5	94.812
54.0	92.598
54.5	90.383

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CANDELA TABULATION - (Cont.)

55.0	88.274
55.5	86.164
56.0	84.055
56.5	81.946
57.0	79.837
57.5	77.833
58.0	75.723
58.5	73.720
59.0	71.716
59.5	69.817
60.0	67.814
60.5	65.810
61.0	63.806
61.5	61.908
62.0	59.904
62.5	58.005
63.0	56.107
63.5	54.209
64.0	52.310
64.5	50.412
65.0	48.619
65.5	46.826
66.0	45.033
66.5	43.135
67.0	41.448
67.5	39.760
68.0	37.967
68.5	36.280
69.0	34.592
69.5	32.905
70.0	31.323
70.5	29.635
71.0	28.054
71.5	26.366
72.0	24.784
72.5	23.202
73.0	21.620
73.5	20.038
74.0	18.562
74.5	16.980
75.0	15.503
75.5	14.132
76.0	12.761
76.5	11.707
77.0	10.757
77.5	9.914
78.0	9.281
78.5	8.754
79.0	8.332
79.5	7.910
80.0	7.383
80.5	6.961
81.0	6.539
81.5	6.117
82.0	5.590
82.5	5.168

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CANDELA TABULATION - (Cont.)

83.0	4.851
83.5	4.430
84.0	4.008
84.5	3.586
85.0	3.164
85.5	2.848
86.0	2.426
86.5	2.109
87.0	1.687
87.5	1.371
88.0	1.055
88.5	0.738
89.0	0.422
89.5	0.316
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
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122.0	0.000
122.5	0.000
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123.5	0.000
124.0	0.000
124.5	0.000
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125.5	0.000
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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
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	692.02	N.A.	40.30
0-30	1225.06	N.A.	71.40
0-40	1459.6	N.A.	85.00
0-60	1647.07	N.A.	95.90
0-80	1713.15	N.A.	99.80
0-90	1716.8	N.A.	100.00
10-90	1526.49	N.A.	88.90
20-40	767.57	N.A.	44.70
20-50	875.93	N.A.	51.00
40-70	235.79	N.A.	13.70
60-80	66.08	N.A.	3.80
70-80	17.76	N.A.	1.00
80-90	3.65	N.A.	0.20
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	1716.8	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	190.31
10-20	501.71
20-30	533.04
30-40	234.54
40-50	108.36
50-60	79.12
60-70	48.32
70-80	17.76
80-90	3.65
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	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	79
4	96	88	82	78	94	87	81	77	84	80	76	82	78	75	81	77	74	73
5	91	82	76	72	89	81	75	71	79	74	71	78	73	70	76	72	69	68
6	86	77	71	66	85	76	70	66	75	70	66	73	69	65	72	68	65	63
7	82	72	66	62	81	72	66	62	71	65	61	69	65	61	68	64	61	59
8	78	68	62	58	77	68	62	58	67	61	58	66	61	57	65	60	57	56
9	75	65	59	55	73	64	58	55	63	58	54	62	58	54	61	57	54	53
10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50

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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

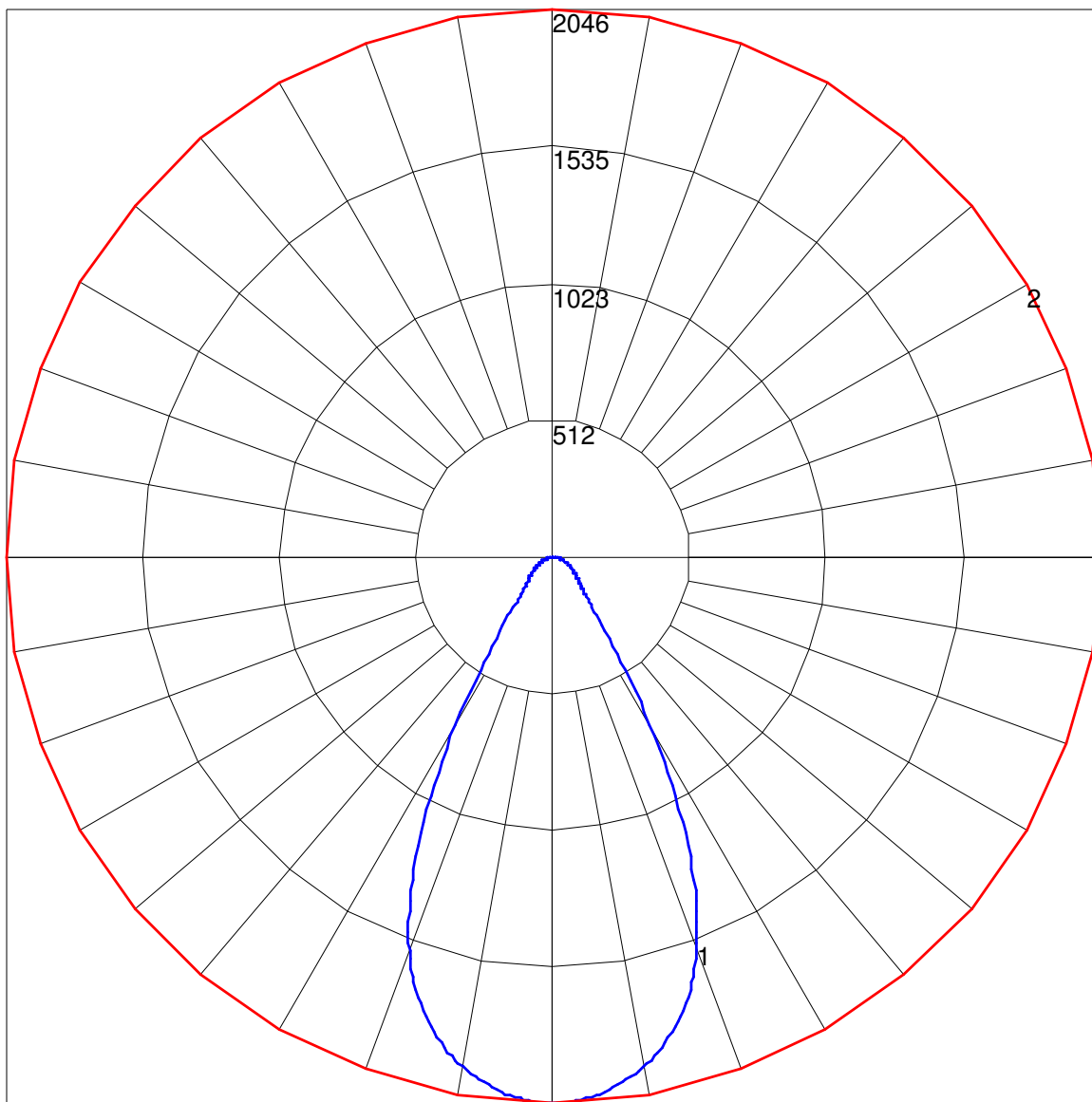
X=2H	Y=2H	20.8	21.9	21.2	22.2	22.5	20.8	21.9	21.2	22.2	22.5
	3H	21.8	22.8	22.2	23.1	23.5	21.8	22.8	22.2	23.1	23.5
	4H	22.0	22.9	22.4	23.3	23.7	22.0	22.9	22.4	23.3	23.7
	6H	22.0	22.9	22.5	23.3	23.7	22.0	22.9	22.5	23.3	23.7
	8H	22.0	22.8	22.5	23.2	23.6	22.0	22.8	22.5	23.2	23.6
	12H	22.0	22.8	22.5	23.2	23.6	22.0	22.8	22.5	23.2	23.6

UGR Viewed Endwise

4H	2H	21.1	22.0	21.5	22.4	22.8	21.1	22.0	21.5	22.4	22.8
	3H	22.3	23.0	22.7	23.5	23.9	22.3	23.0	22.7	23.5	23.9
	4H	22.5	23.2	23.0	23.6	24.1	22.5	23.2	23.0	23.6	24.1
	6H	22.6	23.2	23.1	23.6	24.1	22.6	23.2	23.1	23.6	24.1
	8H	22.6	23.1	23.1	23.6	24.1	22.6	23.1	23.1	23.6	24.1
	12H	22.6	23.1	23.1	23.6	24.0	22.6	23.1	23.1	23.6	24.0
8H	4H	22.5	23.1	23.0	23.5	24.0	22.5	23.1	23.0	23.5	24.0
	6H	22.7	23.1	23.2	23.6	24.1	22.7	23.1	23.2	23.6	24.1
	8H	22.7	23.1	23.2	23.6	24.1	22.7	23.1	23.2	23.6	24.1
	12H	22.7	23.0	23.2	23.5	24.1	22.7	23.0	23.2	23.5	24.1
12H	4H	22.5	23.0	23.0	23.4	23.9	22.5	23.0	23.0	23.4	23.9
	6H	22.6	23.0	23.2	23.5	24.0	22.6	23.0	23.2	23.5	24.0
	8H	22.7	23.0	23.2	23.5	24.1	22.7	23.0	23.2	23.5	24.1

Maximum UGR = 24.1

POLAR GRAPH



Maximum Candela = 2046.009 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.)