

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-850-DIM-UNV-RW-OF-BL_.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-L18-850-DIM-UNV-RW-OF-BL_
[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	1412
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	59
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	50611	50611	50611
55	40049	40049	40049
65	29937	29937	29937
75	15587	15587	15587
85	9448	9448	9448

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CANDELA TABULATION

	<u>0</u>
0.0	1682.320
0.5	1682.320
1.0	1681.453
1.5	1680.586
2.0	1680.586
2.5	1678.852
3.0	1676.250
3.5	1672.781
4.0	1669.313
4.5	1665.844
5.0	1660.641
5.5	1656.305
6.0	1651.102
6.5	1645.032
7.0	1638.962
7.5	1632.891
8.0	1626.821
8.5	1619.884
9.0	1612.079
9.5	1605.142
10.0	1597.337
10.5	1588.665
11.0	1579.126
11.5	1569.587
12.0	1559.181
12.5	1548.775
13.0	1537.502
13.5	1525.362
14.0	1512.354
14.5	1499.346
15.0	1484.604
15.5	1469.862
16.0	1453.386
16.5	1436.910
17.0	1419.566
17.5	1401.355
18.0	1382.278
18.5	1361.465
19.0	1339.786
19.5	1316.372
20.0	1292.091
20.5	1266.943
21.0	1240.061
21.5	1212.311
22.0	1181.960
22.5	1151.609
23.0	1119.523
23.5	1086.571
24.0	1051.884
24.5	1017.197
25.0	981.643
25.5	944.354
26.0	906.198
26.5	868.043

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CANDELA TABULATION - (Cont.)

27.0	830.147
27.5	792.078
28.0	753.662
28.5	715.420
29.0	676.310
29.5	636.940
30.0	597.917
30.5	559.502
31.0	521.606
31.5	485.011
32.0	449.804
32.5	416.504
33.0	385.633
33.5	357.016
34.0	330.394
34.5	306.026
35.0	283.913
35.5	263.621
36.0	245.237
36.5	228.761
37.0	214.106
37.5	201.011
38.0	189.131
38.5	178.551
39.0	169.273
39.5	161.121
40.0	153.837
40.5	147.507
41.0	141.870
41.5	136.840
42.0	132.331
42.5	128.342
43.0	124.700
43.5	121.491
44.0	118.456
44.5	115.681
45.0	113.080
45.5	110.565
46.0	108.223
46.5	105.882
47.0	103.714
47.5	101.546
48.0	99.378
48.5	97.297
49.0	95.216
49.5	93.135
50.0	91.140
50.5	89.232
51.0	87.238
51.5	85.330
52.0	83.509
52.5	81.601
53.0	79.780
53.5	77.959
54.0	76.138
54.5	74.317

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CANDELA TABULATION - (Cont.)

55.0	72.583
55.5	70.848
56.0	69.114
56.5	67.380
57.0	65.645
57.5	63.998
58.0	62.263
58.5	60.616
59.0	58.968
59.5	57.407
60.0	55.759
60.5	54.112
61.0	52.464
61.5	50.903
62.0	49.256
62.5	47.695
63.0	46.134
63.5	44.573
64.0	43.012
64.5	41.451
65.0	39.977
65.5	38.503
66.0	37.028
66.5	35.467
67.0	34.080
67.5	32.693
68.0	31.218
68.5	29.831
69.0	28.443
69.5	27.056
70.0	25.755
70.5	24.368
71.0	23.067
71.5	21.679
72.0	20.379
72.5	19.078
73.0	17.777
73.5	16.476
74.0	15.262
74.5	13.962
75.0	12.747
75.5	11.620
76.0	10.493
76.5	9.626
77.0	8.845
77.5	8.151
78.0	7.631
78.5	7.198
79.0	6.851
79.5	6.504
80.0	6.070
80.5	5.723
81.0	5.376
81.5	5.030
82.0	4.596
82.5	4.249

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CANDELA TABULATION - (Cont.)

83.0	3.989
83.5	3.642
84.0	3.295
84.5	2.948
85.0	2.602
85.5	2.341
86.0	1.995
86.5	1.734
87.0	1.387
87.5	1.127
88.0	0.867
88.5	0.607
89.0	0.347
89.5	0.260
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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : V2DR-L18-850-DIM-UNV-RW-OF-BL_.IES****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
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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Zone	Lumens	%Lamp	%Fixt
0-20	569.01	N.A.	40.30
0-30	1007.3	N.A.	71.40
0-40	1200.15	N.A.	85.00
0-60	1354.29	N.A.	95.90
0-80	1408.63	N.A.	99.80
0-90	1411.63	N.A.	100.00
10-90	1255.14	N.A.	88.90
20-40	631.13	N.A.	44.70
20-50	720.23	N.A.	51.00
40-70	193.88	N.A.	13.70
60-80	54.33	N.A.	3.80
70-80	14.60	N.A.	1.00
80-90	3.00	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	1411.63	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	156.48
10-20	412.53
20-30	438.29
30-40	192.85
40-50	89.10
50-60	65.05
60-70	39.73
70-80	14.60
80-90	3.00
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	78
4	96	88	82	78	94	87	81	77	84	80	76	82	78	75	81	77	74	73
5	91	82	76	71	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	70	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

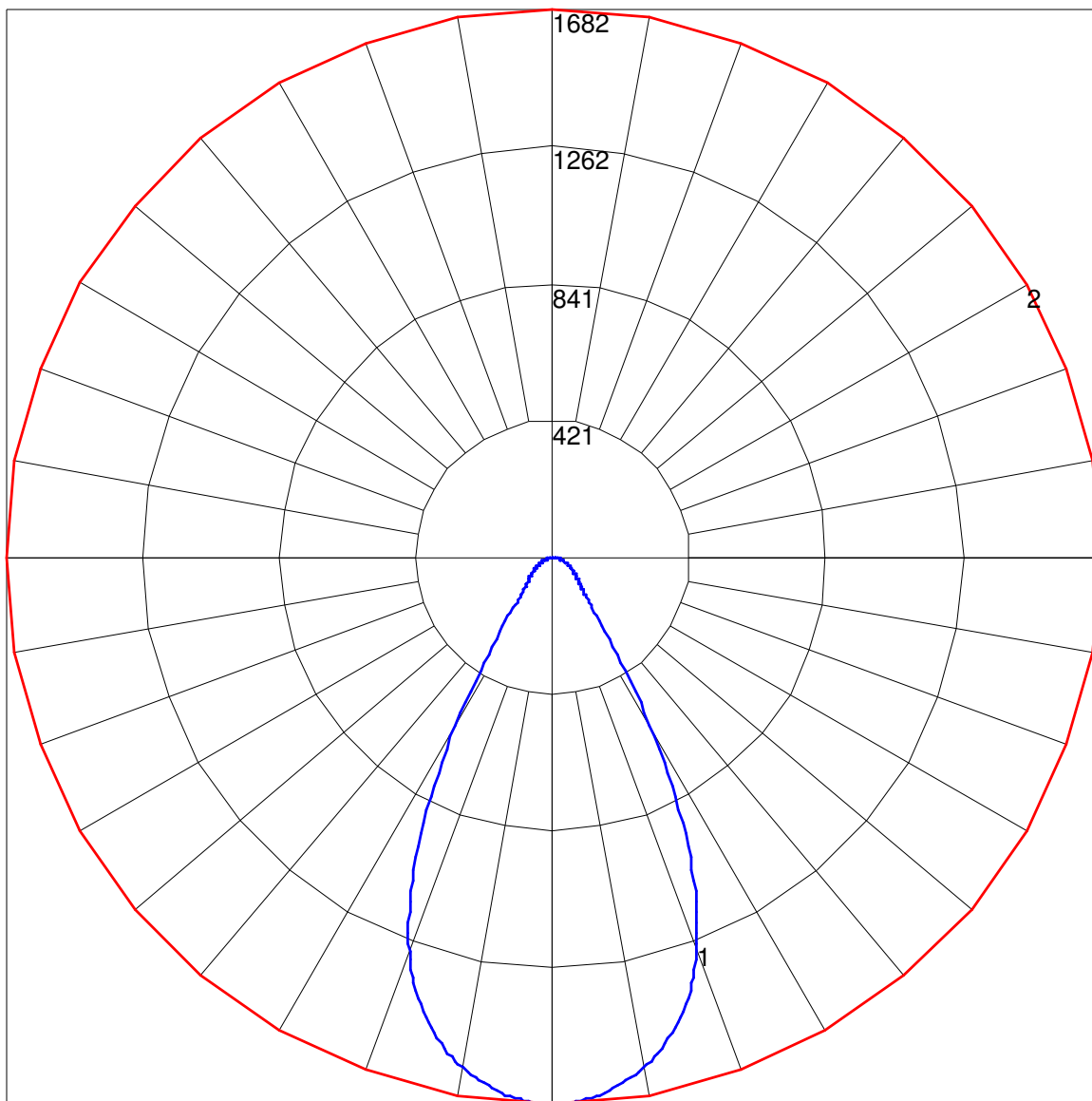
X=2H	Y=2H	20.1	21.2	20.5	21.5	21.8	20.1	21.2	20.5	21.5	21.8
	3H	21.1	22.1	21.5	22.4	22.8	21.1	22.1	21.5	22.4	22.8
	4H	21.3	22.2	21.7	22.6	23.0	21.3	22.2	21.7	22.6	23.0
	6H	21.4	22.2	21.8	22.6	23.0	21.4	22.2	21.8	22.6	23.0
	8H	21.4	22.1	21.8	22.5	22.9	21.4	22.1	21.8	22.5	22.9
	12H	21.3	22.1	21.8	22.5	22.9	21.3	22.1	21.8	22.5	22.9

UGR Viewed Endwise

4H	2H	20.4	21.3	20.8	21.7	22.1	20.4	21.3	20.8	21.7	22.1
	3H	21.6	22.3	22.0	22.8	23.2	21.6	22.3	22.0	22.8	23.2
	4H	21.8	22.5	22.3	22.9	23.4	21.8	22.5	22.3	22.9	23.4
	6H	21.9	22.5	22.4	22.9	23.4	21.9	22.5	22.4	22.9	23.4
	8H	21.9	22.4	22.4	22.9	23.4	21.9	22.4	22.4	22.9	23.4
	12H	21.9	22.4	22.4	22.9	23.3	21.9	22.4	22.4	22.9	23.3
8H	4H	21.8	22.4	22.3	22.8	23.3	21.8	22.4	22.3	22.8	23.3
	6H	22.0	22.4	22.5	22.9	23.4	22.0	22.4	22.5	22.9	23.4
	8H	22.0	22.4	22.5	22.9	23.4	22.0	22.4	22.5	22.9	23.4
	12H	22.0	22.4	22.5	22.8	23.4	22.0	22.4	22.5	22.8	23.4
12H	4H	21.8	22.3	22.3	22.7	23.2	21.8	22.3	22.3	22.7	23.2
	6H	21.9	22.3	22.5	22.8	23.3	21.9	22.3	22.5	22.8	23.3
	8H	22.0	22.3	22.5	22.8	23.4	22.0	22.3	22.5	22.8	23.4

Maximum UGR = 23.4

POLAR GRAPH



Maximum Candela = 1682.32 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.)