

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-935-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-L18-935-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	1480
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	62
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	61050	61050	61050
55	53319	53319	53319
65	45548	45548	45548
75	36747	36747	36747
85	20582	20582	20582

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CANDELA TABULATION

	<u>0</u>
0.0	1746.428
0.5	1745.528
1.0	1745.528
1.5	1744.628
2.0	1743.729
2.5	1741.029
3.0	1738.330
3.5	1735.631
4.0	1732.032
4.5	1727.533
5.0	1723.034
5.5	1718.535
6.0	1714.037
6.5	1708.638
7.0	1703.240
7.5	1697.841
8.0	1691.543
8.5	1685.244
9.0	1678.046
9.5	1670.848
10.0	1662.751
10.5	1653.753
11.0	1644.755
11.5	1634.858
12.0	1624.961
12.5	1613.264
13.0	1601.567
13.5	1588.970
14.0	1575.474
14.5	1561.078
15.0	1545.782
15.5	1528.687
16.0	1511.591
16.5	1492.697
17.0	1472.002
17.5	1451.308
18.0	1427.914
18.5	1403.621
19.0	1376.628
19.5	1347.836
20.0	1318.144
20.5	1285.752
21.0	1252.461
21.5	1216.471
22.0	1178.681
22.5	1139.992
23.0	1099.503
23.5	1058.114
24.0	1015.825
24.5	972.637
25.0	928.549
25.5	884.911
26.0	840.733
26.5	797.005

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CANDELA TABULATION - (Cont.)

27.0	753.906
27.5	711.708
28.0	670.409
28.5	630.100
29.0	591.050
29.5	552.991
30.0	517.270
30.5	483.529
31.0	451.678
31.5	421.986
32.0	394.183
32.5	368.360
33.0	344.697
33.5	323.013
34.0	303.308
34.5	285.313
35.0	268.937
35.5	254.091
36.0	240.685
36.5	228.718
37.0	217.921
37.5	208.294
38.0	199.656
38.5	191.828
39.0	184.810
39.5	178.512
40.0	172.753
40.5	167.625
41.0	162.946
41.5	158.627
42.0	154.668
42.5	150.979
43.0	147.650
43.5	144.591
44.0	141.712
44.5	139.012
45.0	136.403
45.5	133.974
46.0	131.634
46.5	129.385
47.0	127.226
47.5	125.066
48.0	122.997
48.5	120.927
49.0	118.858
49.5	116.878
50.0	114.989
50.5	113.099
51.0	111.120
51.5	109.320
52.0	107.431
52.5	105.631
53.0	103.832
53.5	102.032
54.0	100.233
54.5	98.433

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CANDELA TABULATION - (Cont.)

55.0	96.634
55.5	94.834
56.0	93.125
56.5	91.235
57.0	89.526
57.5	87.726
58.0	85.927
58.5	84.127
59.0	82.328
59.5	80.528
60.0	78.729
60.5	76.929
61.0	75.130
61.5	73.240
62.0	71.531
62.5	69.731
63.0	67.842
63.5	66.042
64.0	64.243
64.5	62.533
65.0	60.824
65.5	59.114
66.0	57.404
66.5	55.785
67.0	54.075
67.5	52.546
68.0	50.926
68.5	49.397
69.0	47.867
69.5	46.247
70.0	44.718
70.5	43.188
71.0	41.749
71.5	40.219
72.0	38.690
72.5	37.250
73.0	35.720
73.5	34.281
74.0	32.931
74.5	31.491
75.0	30.052
75.5	28.702
76.0	27.353
76.5	26.003
77.0	24.743
77.5	23.394
78.0	22.134
78.5	20.874
79.0	19.615
79.5	18.355
80.0	17.185
80.5	15.926
81.0	14.756
81.5	13.586
82.0	12.417
82.5	11.247

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CANDELA TABULATION - (Cont.)

83.0	10.167
83.5	8.998
84.0	7.918
84.5	6.748
85.0	5.668
85.5	4.499
86.0	3.329
86.5	2.519
87.0	1.800
87.5	1.080
88.0	0.720
88.5	0.540
89.0	0.360
89.5	0.270
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
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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PHOTOMETRIC FILENAME : V2DR-L18-935-DIM-UNV-LW-OF_.IES

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	590.43	N.A.	39.90
0-30	1006.59	N.A.	68.00
0-40	1187.4	N.A.	80.20
0-60	1380.66	N.A.	93.30
0-80	1473.17	N.A.	99.50
0-90	1480.29	N.A.	100.00
10-90	1317.69	N.A.	89.00
20-40	596.97	N.A.	40.30
20-50	703.81	N.A.	47.50
40-70	253.74	N.A.	17.10
60-80	92.51	N.A.	6.20
70-80	32.03	N.A.	2.20
80-90	7.13	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	1480.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	162.60
10-20	427.83
20-30	416.16
30-40	180.81
40-50	106.84
50-60	86.43
60-70	60.48
70-80	32.03
80-90	7.13
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

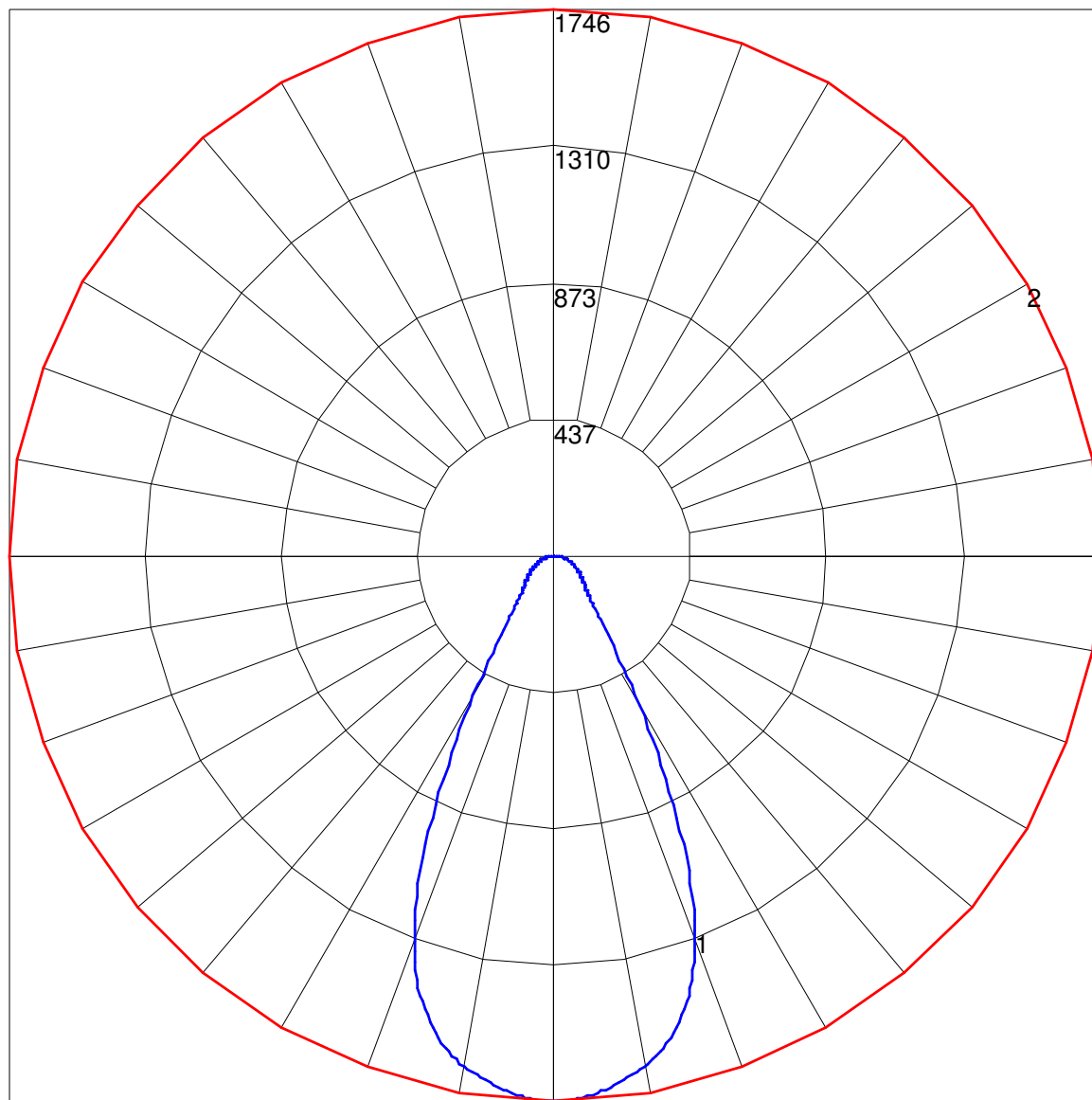
X=2H	Y=2H	22.1	23.2	22.4	23.6	23.9	22.1	23.2	22.4	23.6	23.9
	3H	23.6	24.6	24.0	24.9	25.3	23.6	24.6	24.0	24.9	25.3
	4H	24.1	25.1	24.5	25.4	25.8	24.1	25.1	24.5	25.4	25.8
	6H	24.4	25.3	24.8	25.7	26.1	24.4	25.3	24.8	25.7	26.1
	8H	24.5	25.4	24.9	25.8	26.2	24.5	25.4	24.9	25.8	26.2
	12H	24.5	25.4	25.0	25.7	26.2	24.5	25.4	25.0	25.7	26.2

UGR Viewed Endwise

4H	2H	22.6	23.5	23.0	23.9	24.3	22.6	23.5	23.0	23.9	24.3
	3H	24.2	25.0	24.6	25.4	25.9	24.2	25.0	24.6	25.4	25.9
	4H	24.9	25.6	25.3	26.0	26.5	24.9	25.6	25.3	26.0	26.5
	6H	25.3	25.9	25.8	26.4	26.9	25.3	25.9	25.8	26.4	26.9
	8H	25.4	26.0	25.9	26.5	26.9	25.4	26.0	25.9	26.5	26.9
	12H	25.5	26.0	26.0	26.5	27.0	25.5	26.0	26.0	26.5	27.0
8H	4H	25.1	25.6	25.5	26.1	26.6	25.1	25.6	25.5	26.1	26.6
	6H	25.6	26.1	26.1	26.6	27.1	25.6	26.1	26.1	26.6	27.1
	8H	25.8	26.2	26.3	26.7	27.2	25.8	26.2	26.3	26.7	27.2
	12H	25.9	26.3	26.4	26.8	27.3	25.9	26.3	26.4	26.8	27.3
12H	4H	25.0	25.6	25.5	26.0	26.5	25.0	25.6	25.5	26.0	26.5
	6H	25.6	26.1	26.2	26.5	27.1	25.6	26.1	26.2	26.5	27.1
	8H	25.9	26.2	26.4	26.7	27.3	25.9	26.2	26.4	26.7	27.3

Maximum UGR = 27.3

POLAR GRAPH



Maximum Candela = 1746.428 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.)