

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-827-DIM-UNV-RW-OF-CS_.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-L18-827-DIM-UNV-RW-OF-CS_
[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	1579
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	66
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	56628	56628	56628
55	44810	44810	44810
65	33496	33496	33496
75	17441	17441	17441
85	10570	10570	10570

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CANDELA TABULATION

	<u>0</u>
0.0	1882.328
0.5	1882.328
1.0	1881.358
1.5	1880.387
2.0	1880.387
2.5	1878.447
3.0	1875.536
3.5	1871.655
4.0	1867.774
4.5	1863.893
5.0	1858.071
5.5	1853.220
6.0	1847.398
6.5	1840.606
7.0	1833.814
7.5	1827.023
8.0	1820.231
8.5	1812.468
9.0	1803.736
9.5	1795.974
10.0	1787.241
10.5	1777.539
11.0	1766.866
11.5	1756.193
12.0	1744.549
12.5	1732.906
13.0	1720.293
13.5	1706.709
14.0	1692.155
14.5	1677.601
15.0	1661.106
15.5	1644.611
16.0	1626.176
16.5	1607.741
17.0	1588.336
17.5	1567.960
18.0	1546.614
18.5	1523.327
19.0	1499.071
19.5	1472.873
20.0	1445.706
20.5	1417.568
21.0	1387.489
21.5	1356.441
22.0	1322.481
22.5	1288.521
23.0	1252.621
23.5	1215.751
24.0	1176.940
24.5	1138.129
25.0	1098.348
25.5	1056.626
26.0	1013.934
26.5	971.242

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CANDELA TABULATION - (Cont.)

27.0	928.842
27.5	886.247
28.0	843.264
28.5	800.475
29.0	756.715
29.5	712.665
30.0	669.003
30.5	626.020
31.0	583.619
31.5	542.673
32.0	503.280
32.5	466.022
33.0	431.480
33.5	399.461
34.0	369.674
34.5	342.409
35.0	317.667
35.5	294.963
36.0	274.393
36.5	255.958
37.0	239.560
37.5	224.909
38.0	211.616
38.5	199.779
39.0	189.397
39.5	180.277
40.0	172.126
40.5	165.043
41.0	158.737
41.5	153.109
42.0	148.064
42.5	143.600
43.0	139.525
43.5	135.935
44.0	132.539
44.5	129.434
45.0	126.523
45.5	123.710
46.0	121.090
46.5	118.470
47.0	116.045
47.5	113.619
48.0	111.193
48.5	108.865
49.0	106.536
49.5	104.207
50.0	101.976
50.5	99.841
51.0	97.609
51.5	95.475
52.0	93.437
52.5	91.303
53.0	89.265
53.5	87.227
54.0	85.190
54.5	83.152

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CANDELA TABULATION - (Cont.)

55.0	81.212
55.5	79.271
56.0	77.331
56.5	75.390
57.0	73.450
57.5	71.606
58.0	69.666
58.5	67.822
59.0	65.979
59.5	64.232
60.0	62.389
60.5	60.545
61.0	58.701
61.5	56.955
62.0	55.111
62.5	53.365
63.0	51.618
63.5	49.872
64.0	48.126
64.5	46.379
65.0	44.730
65.5	43.080
66.0	41.431
66.5	39.684
67.0	38.132
67.5	36.579
68.0	34.930
68.5	33.377
69.0	31.825
69.5	30.272
70.0	28.817
70.5	27.265
71.0	25.809
71.5	24.257
72.0	22.801
72.5	21.346
73.0	19.891
73.5	18.435
74.0	17.077
74.5	15.621
75.0	14.263
75.5	13.002
76.0	11.740
76.5	10.770
77.0	9.897
77.5	9.121
78.0	8.538
78.5	8.053
79.0	7.665
79.5	7.277
80.0	6.792
80.5	6.404
81.0	6.016
81.5	5.628
82.0	5.142
82.5	4.754

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CANDELA TABULATION - (Cont.)

83.0	4.463
83.5	4.075
84.0	3.687
84.5	3.299
85.0	2.911
85.5	2.620
86.0	2.232
86.5	1.941
87.0	1.552
87.5	1.261
88.0	0.970
88.5	0.679
89.0	0.388
89.5	0.291
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
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121.0	0.000
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122.0	0.000
122.5	0.000
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125.5	0.000
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126.5	0.000
127.0	0.000
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128.0	0.000
128.5	0.000
129.0	0.000
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130.0	0.000
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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
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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
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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	636.66	N.A.	40.30
0-30	1127.06	N.A.	71.40
0-40	1342.83	N.A.	85.00
0-60	1515.3	N.A.	95.90
0-80	1576.1	N.A.	99.80
0-90	1579.45	N.A.	100.00
10-90	1404.37	N.A.	88.90
20-40	706.17	N.A.	44.70
20-50	805.86	N.A.	51.00
40-70	216.93	N.A.	13.70
60-80	60.79	N.A.	3.80
70-80	16.33	N.A.	1.00
80-90	3.36	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	1579.45	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	175.09
10-20	461.58
20-30	490.40
30-40	215.77
40-50	99.69
50-60	72.79
60-70	44.46
70-80	16.33
80-90	3.36
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	111	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	86	83	80	79
4	96	88	82	78	94	87	81	77	85	80	76	82	79	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	73	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	62	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	20.5	21.6	20.9	21.9	22.2	20.5	21.6	20.9	21.9	22.2
	3H	21.5	22.5	21.9	22.8	23.2	21.5	22.5	21.9	22.8	23.2
	4H	21.7	22.6	22.1	23.0	23.4	21.7	22.6	22.1	23.0	23.4
	6H	21.7	22.6	22.2	23.0	23.3	21.7	22.6	22.2	23.0	23.3
	8H	21.7	22.5	22.2	22.9	23.3	21.7	22.5	22.2	22.9	23.3
	12H	21.7	22.5	22.2	22.9	23.3	21.7	22.5	22.2	22.9	23.3

UGR Viewed Endwise

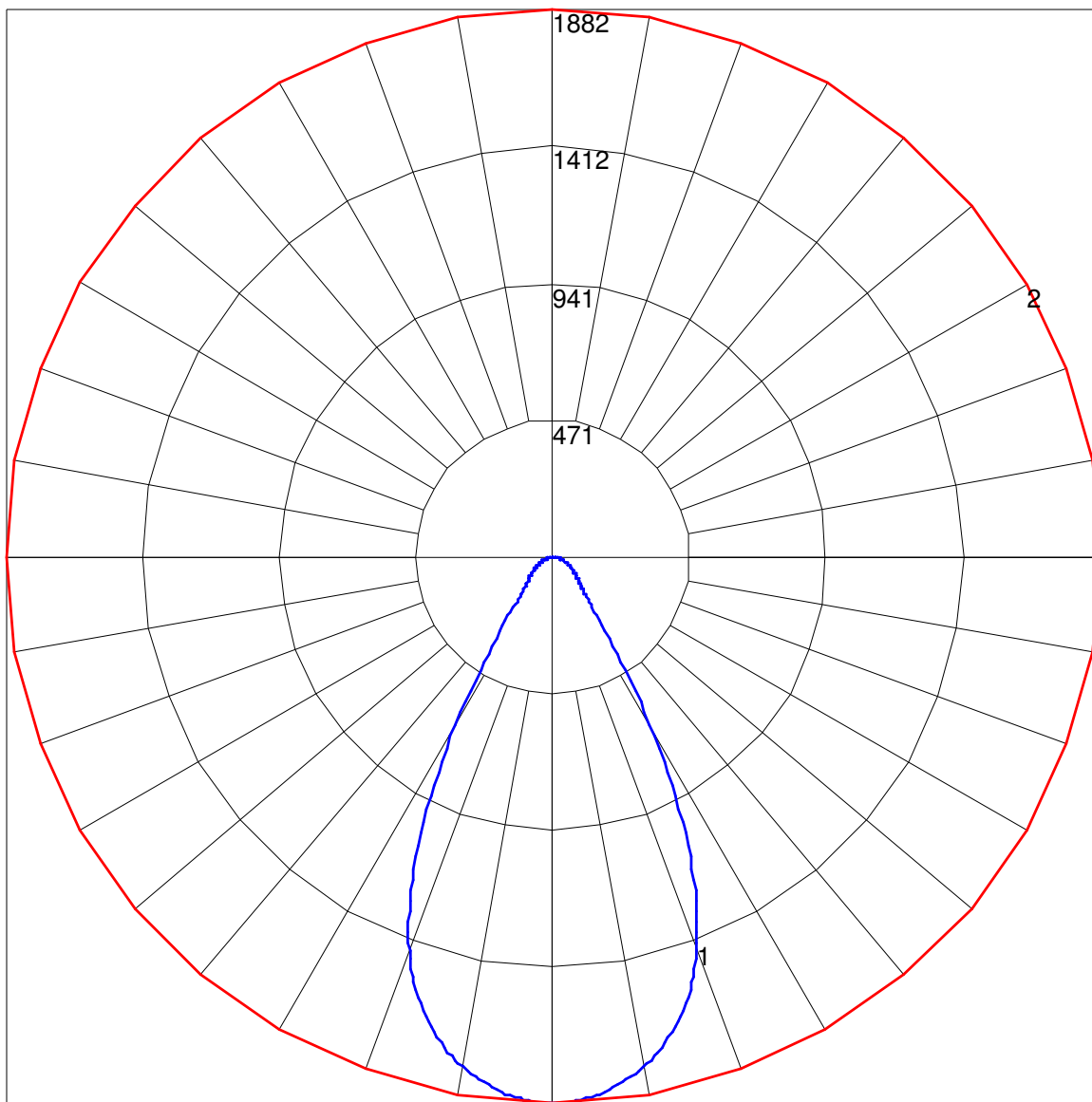
4H	2H	20.8	21.7	21.2	22.1	22.5	20.8	21.7	21.2	22.1	22.5
	3H	22.0	22.7	22.4	23.2	23.6	22.0	22.7	22.4	23.2	23.6
	4H	22.2	22.9	22.7	23.3	23.8	22.2	22.9	22.7	23.3	23.8
	6H	22.3	22.9	22.8	23.3	23.8	22.3	22.9	22.8	23.3	23.8
	8H	22.3	22.8	22.8	23.3	23.8	22.3	22.8	22.8	23.3	23.8
	12H	22.3	22.8	22.8	23.3	23.7	22.3	22.8	22.8	23.3	23.7

8H	4H	22.2	22.8	22.7	23.2	23.7	22.2	22.8	22.7	23.2	23.7
	6H	22.4	22.8	22.9	23.3	23.8	22.4	22.8	22.9	23.3	23.8
	8H	22.4	22.8	22.9	23.3	23.8	22.4	22.8	22.9	23.3	23.8
	12H	22.4	22.7	22.9	23.2	23.8	22.4	22.7	22.9	23.2	23.8

12H	4H	22.2	22.6	22.7	23.1	23.6	22.2	22.6	22.7	23.1	23.6
	6H	22.3	22.7	22.9	23.2	23.7	22.3	22.7	22.9	23.2	23.7
	8H	22.4	22.7	22.9	23.2	23.8	22.4	22.7	22.9	23.2	23.8

Maximum UGR = 23.8

POLAR GRAPH



Maximum Candela = 1882.328 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.)