

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-840-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-L18-840-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	1734
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	73
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	62168	62168	62168
55	49193	49193	49193
65	36773	36773	36773
75	19146	19146	19146
85	11605	11605	11605

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CANDELA TABULATION

	<u>0</u>
0.0	2066.469
0.5	2066.469
1.0	2065.403
1.5	2064.338
2.0	2064.338
2.5	2062.208
3.0	2059.012
3.5	2054.751
4.0	2050.491
4.5	2046.230
5.0	2039.839
5.5	2034.513
6.0	2028.122
6.5	2020.665
7.0	2013.209
7.5	2005.753
8.0	1998.296
8.5	1989.775
9.0	1980.188
9.5	1971.667
10.0	1962.080
10.5	1951.428
11.0	1939.711
11.5	1927.994
12.0	1915.212
12.5	1902.429
13.0	1888.582
13.5	1873.669
14.0	1857.691
14.5	1841.713
15.0	1823.605
15.5	1805.497
16.0	1785.258
16.5	1765.020
17.0	1743.716
17.5	1721.347
18.0	1697.913
18.5	1672.348
19.0	1645.718
19.5	1616.958
20.0	1587.133
20.5	1556.243
21.0	1523.222
21.5	1489.136
22.0	1451.854
22.5	1414.572
23.0	1375.160
23.5	1334.683
24.0	1292.075
24.5	1249.468
25.0	1205.795
25.5	1159.992
26.0	1113.124
26.5	1066.255

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CANDELA TABULATION - (Cont.)

27.0	1019.706
27.5	972.945
28.0	925.757
28.5	878.782
29.0	830.742
29.5	782.382
30.0	734.448
30.5	687.261
31.0	640.712
31.5	595.761
32.0	552.514
32.5	511.611
33.0	473.690
33.5	438.539
34.0	405.837
34.5	375.906
35.0	348.743
35.5	323.818
36.0	301.236
36.5	280.997
37.0	262.995
37.5	246.911
38.0	232.318
38.5	219.323
39.0	207.925
39.5	197.912
40.0	188.965
40.5	181.189
41.0	174.265
41.5	168.087
42.0	162.548
42.5	157.648
43.0	153.174
43.5	149.233
44.0	145.505
44.5	142.096
45.0	138.901
45.5	135.812
46.0	132.936
46.5	130.060
47.0	127.397
47.5	124.734
48.0	122.071
48.5	119.514
49.0	116.958
49.5	114.401
50.0	111.951
50.5	109.608
51.0	107.158
51.5	104.815
52.0	102.578
52.5	100.234
53.0	97.997
53.5	95.761
54.0	93.524
54.5	91.287

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CANDELA TABULATION - (Cont.)

55.0	89.156
55.5	87.026
56.0	84.896
56.5	82.765
57.0	80.635
57.5	78.611
58.0	76.481
58.5	74.457
59.0	72.433
59.5	70.516
60.0	68.492
60.5	66.468
61.0	64.444
61.5	62.527
62.0	60.503
62.5	58.585
63.0	56.668
63.5	54.751
64.0	52.833
64.5	50.916
65.0	49.105
65.5	47.294
66.0	45.484
66.5	43.566
67.0	41.862
67.5	40.158
68.0	38.347
68.5	36.643
69.0	34.938
69.5	33.234
70.0	31.636
70.5	29.932
71.0	28.334
71.5	26.630
72.0	25.032
72.5	23.434
73.0	21.836
73.5	20.239
74.0	18.747
74.5	17.150
75.0	15.658
75.5	14.274
76.0	12.889
76.5	11.824
77.0	10.865
77.5	10.013
78.0	9.374
78.5	8.841
79.0	8.415
79.5	7.989
80.0	7.456
80.5	7.030
81.0	6.604
81.5	6.178
82.0	5.646
82.5	5.219

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CANDELA TABULATION - (Cont.)

83.0	4.900
83.5	4.474
84.0	4.048
84.5	3.622
85.0	3.196
85.5	2.876
86.0	2.450
86.5	2.130
87.0	1.704
87.5	1.385
88.0	1.065
88.5	0.746
89.0	0.426
89.5	0.320
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
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125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
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128.5	0.000
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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	698.94	N.A.	40.30
0-30	1237.31	N.A.	71.40
0-40	1474.19	N.A.	85.00
0-60	1663.54	N.A.	95.90
0-80	1730.28	N.A.	99.80
0-90	1733.96	N.A.	100.00
10-90	1541.75	N.A.	88.90
20-40	775.25	N.A.	44.70
20-50	884.69	N.A.	51.00
40-70	238.15	N.A.	13.70
60-80	66.74	N.A.	3.80
70-80	17.93	N.A.	1.00
80-90	3.69	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	1733.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	192.21
10-20	506.73
20-30	538.37
30-40	236.88
40-50	109.44
50-60	79.91
60-70	48.81
70-80	17.93
80-90	3.69
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	85	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

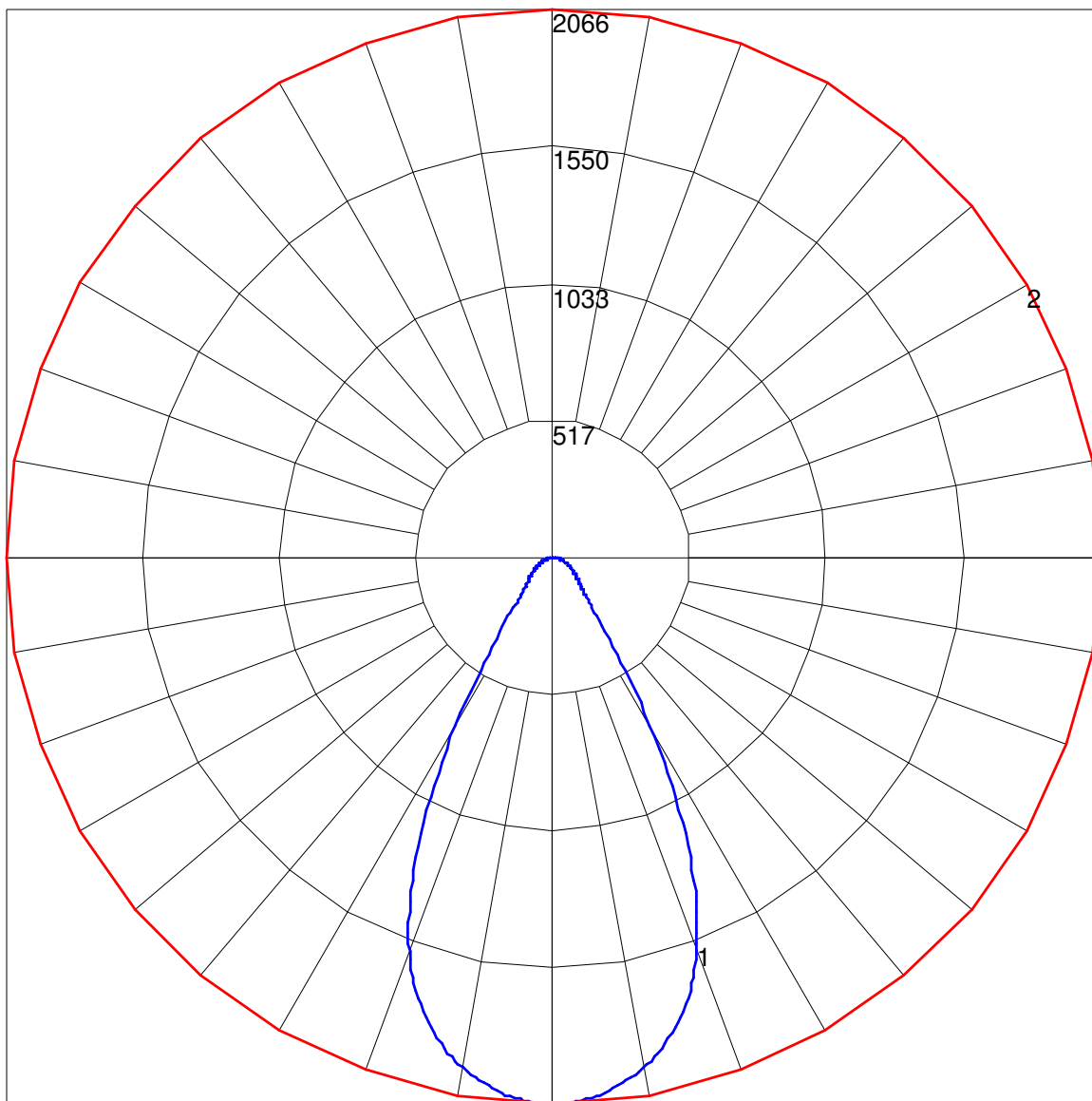
X=2H	Y=2H	20.8	21.9	21.2	22.2	22.5	20.8	21.9	21.2	22.2	22.5
	3H	21.8	22.8	22.2	23.1	23.5	21.8	22.8	22.2	23.1	23.5
	4H	22.0	22.9	22.4	23.3	23.7	22.0	22.9	22.4	23.3	23.7
	6H	22.0	22.9	22.5	23.3	23.6	22.0	22.9	22.5	23.3	23.6
	8H	22.0	22.8	22.5	23.2	23.6	22.0	22.8	22.5	23.2	23.6
	12H	22.0	22.8	22.5	23.2	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	22.9	23.0	23.4	23.9	22.5	22.9	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 = 2066.469 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.)