

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-840-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-L5-840-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	495
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	74
Total Luminaire Watts	6.7
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	17742	17742	17742
55	14039	14039	14039
65	10494	10494	10494
75	5465	5465	5465
85	3312	3312	3312

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CANDELA TABULATION

	<u>0</u>
0.0	589.746
0.5	589.746
1.0	589.442
1.5	589.138
2.0	589.138
2.5	588.530
3.0	587.618
3.5	586.402
4.0	585.186
4.5	583.970
5.0	582.146
5.5	580.626
6.0	578.802
6.5	576.674
7.0	574.546
7.5	572.418
8.0	570.290
8.5	567.858
9.0	565.122
9.5	562.690
10.0	559.954
10.5	556.914
11.0	553.571
11.5	550.227
12.0	546.579
12.5	542.931
13.0	538.979
13.5	534.723
14.0	530.163
14.5	525.603
15.0	520.435
15.5	515.267
16.0	509.492
16.5	503.716
17.0	497.636
17.5	491.252
18.0	484.564
18.5	477.268
19.0	469.669
19.5	461.461
20.0	452.949
20.5	444.133
21.0	434.709
21.5	424.982
22.0	414.342
22.5	403.702
23.0	392.454
23.5	380.903
24.0	368.743
24.5	356.583
25.0	344.120
25.5	331.048
26.0	317.672
26.5	304.297

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CANDELA TABULATION - (Cont.)

27.0	291.012
27.5	277.667
28.0	264.200
28.5	250.794
29.0	237.084
29.5	223.283
30.0	209.603
30.5	196.136
31.0	182.852
31.5	170.023
32.0	157.681
32.5	146.008
33.0	135.186
33.5	125.154
34.0	115.821
34.5	107.279
35.0	99.527
35.5	92.414
36.0	85.969
36.5	80.193
37.0	75.056
37.5	70.465
38.0	66.301
38.5	62.592
39.0	59.339
39.5	56.482
40.0	53.928
40.5	51.709
41.0	49.733
41.5	47.970
42.0	46.389
42.5	44.991
43.0	43.714
43.5	42.589
44.0	41.525
44.5	40.553
45.0	39.641
45.5	38.759
46.0	37.938
46.5	37.117
47.0	36.358
47.5	35.598
48.0	34.838
48.5	34.108
49.0	33.378
49.5	32.649
50.0	31.950
50.5	31.281
51.0	30.582
51.5	29.913
52.0	29.274
52.5	28.606
53.0	27.967
53.5	27.329
54.0	26.691
54.5	26.052

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CANDELA TABULATION - (Cont.)

55.0	25.444
55.5	24.836
56.0	24.228
56.5	23.620
57.0	23.012
57.5	22.435
58.0	21.827
58.5	21.249
59.0	20.671
59.5	20.124
60.0	19.547
60.5	18.969
61.0	18.392
61.5	17.844
62.0	17.267
62.5	16.720
63.0	16.172
63.5	15.625
64.0	15.078
64.5	14.531
65.0	14.014
65.5	13.497
66.0	12.980
66.5	12.433
67.0	11.947
67.5	11.461
68.0	10.944
68.5	10.457
69.0	9.971
69.5	9.485
70.0	9.029
70.5	8.542
71.0	8.086
71.5	7.600
72.0	7.144
72.5	6.688
73.0	6.232
73.5	5.776
74.0	5.350
74.5	4.894
75.0	4.469
75.5	4.074
76.0	3.678
76.5	3.374
77.0	3.101
77.5	2.858
78.0	2.675
78.5	2.523
79.0	2.402
79.5	2.280
80.0	2.128
80.5	2.006
81.0	1.885
81.5	1.763
82.0	1.611
82.5	1.490

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CANDELA TABULATION - (Cont.)

83.0	1.398
83.5	1.277
84.0	1.155
84.5	1.034
85.0	0.912
85.5	0.821
86.0	0.699
86.5	0.608
87.0	0.486
87.5	0.395
88.0	0.304
88.5	0.213
89.0	0.122
89.5	0.091
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
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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
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149.0	0.000
149.5	0.000
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150.5	0.000
151.0	0.000
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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	199.47	N.A.	40.30
0-30	353.11	N.A.	71.40
0-40	420.72	N.A.	85.00
0-60	474.75	N.A.	95.90
0-80	493.80	N.A.	99.80
0-90	494.85	N.A.	100.00
10-90	440.00	N.A.	88.90
20-40	221.25	N.A.	44.70
20-50	252.48	N.A.	51.00
40-70	67.97	N.A.	13.70
60-80	19.05	N.A.	3.80
70-80	5.12	N.A.	1.00
80-90	1.05	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	494.85	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	54.86
10-20	144.61
20-30	153.64
30-40	67.60
40-50	31.23
50-60	22.80
60-70	13.93
70-80	5.12
80-90	1.05
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	54	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	16.5	17.6	16.9	17.9	18.2	16.5	17.6	16.9	17.9	18.2
	3H	17.5	18.5	17.9	18.8	19.2	17.5	18.5	17.9	18.8	19.2
	4H	17.7	18.6	18.1	19.0	19.4	17.7	18.6	18.1	19.0	19.4
	6H	17.7	18.6	18.2	19.0	19.4	17.7	18.6	18.2	19.0	19.4
	8H	17.7	18.5	18.2	18.9	19.3	17.7	18.5	18.2	18.9	19.3
	12H	17.7	18.5	18.2	18.9	19.3	17.7	18.5	18.2	18.9	19.3

UGR Viewed Endwise

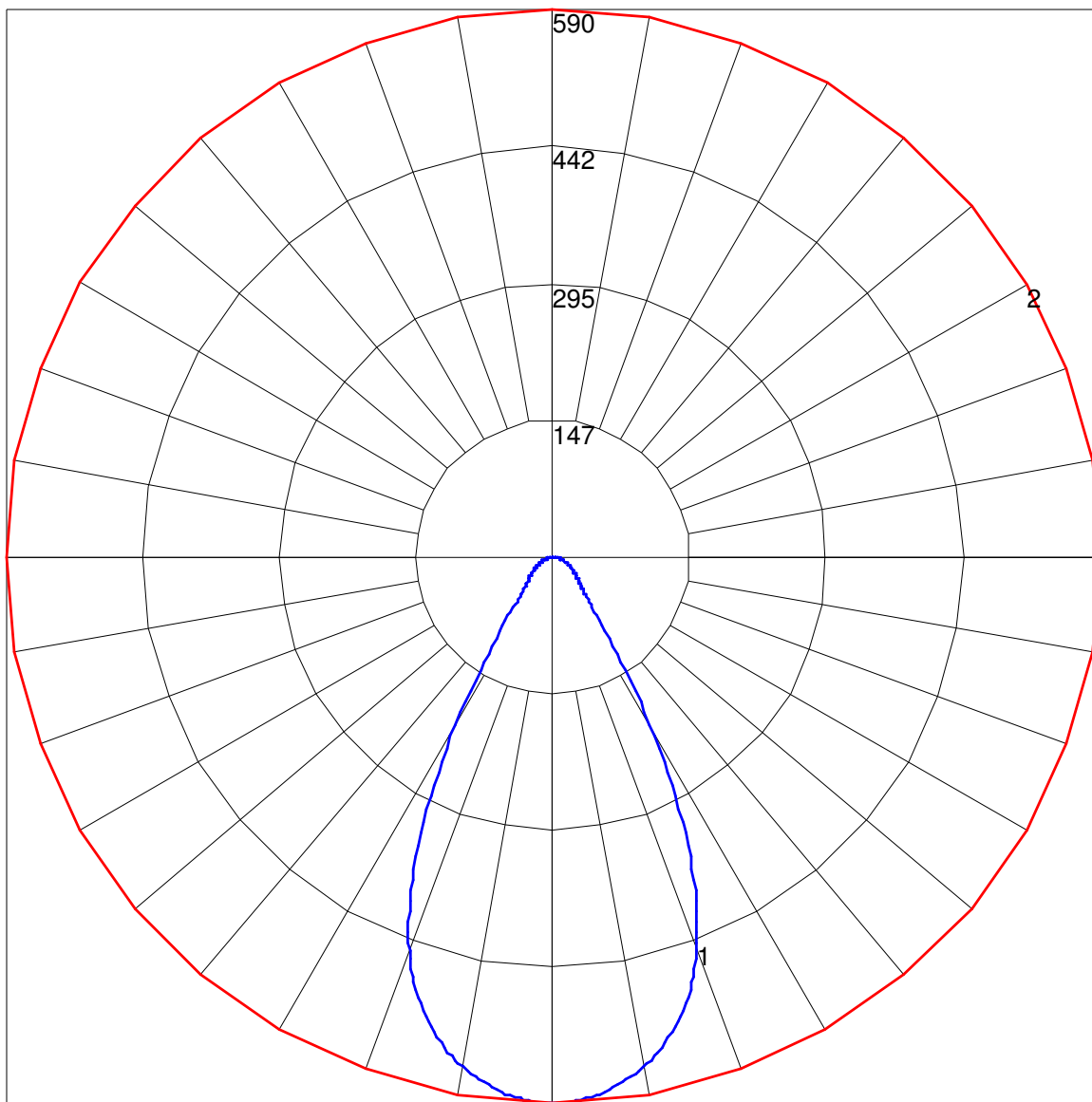
4H	2H	16.8	17.7	17.2	18.1	18.5	16.8	17.7	17.2	18.1	18.5
	3H	18.0	18.7	18.4	19.2	19.6	18.0	18.7	18.4	19.2	19.6
	4H	18.2	18.9	18.7	19.3	19.8	18.2	18.9	18.7	19.3	19.8
	6H	18.3	18.9	18.8	19.3	19.8	18.3	18.9	18.8	19.3	19.8
	8H	18.3	18.8	18.8	19.3	19.8	18.3	18.8	18.8	19.3	19.8
	12H	18.3	18.8	18.8	19.3	19.7	18.3	18.8	18.8	19.3	19.7

8H	4H	18.2	18.8	18.7	19.2	19.7	18.2	18.8	18.7	19.2	19.7
	6H	18.4	18.8	18.9	19.3	19.8	18.4	18.8	18.9	19.3	19.8
	8H	18.4	18.8	18.9	19.3	19.8	18.4	18.8	18.9	19.3	19.8
	12H	18.4	18.7	18.9	19.2	19.8	18.4	18.7	18.9	19.2	19.8

12H	4H	18.2	18.6	18.7	19.1	19.6	18.2	18.6	18.7	19.1	19.6
	6H	18.3	18.7	18.9	19.2	19.7	18.3	18.7	18.9	19.2	19.7
	8H	18.4	18.7	18.9	19.2	19.8	18.4	18.7	18.9	19.2	19.8

Maximum UGR = 19.8

POLAR GRAPH



Maximum Candela = 589.746 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.)