

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-840-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.  
[ISSUEDATE] 2025-05-20  
[MANUFAC] WILLIAMS INDOOR  
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMCAT] V2DR-L5-840-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 met  
[MORE] hod 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	485
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	72
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	17387	17387	17387
55	13758	13758	13758
65	10285	10285	10285
75	5355	5355	5355
85	3246	3246	3246

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CANDELA TABULATION

	<u>0</u>
0.0	577.951
0.5	577.951
1.0	577.653
1.5	577.355
2.0	577.355
2.5	576.759
3.0	575.865
3.5	574.674
4.0	573.482
4.5	572.291
5.0	570.503
5.5	569.013
6.0	567.226
6.5	565.141
7.0	563.055
7.5	560.970
8.0	558.884
8.5	556.501
9.0	553.820
9.5	551.437
10.0	548.755
10.5	545.776
11.0	542.499
11.5	539.222
12.0	535.647
12.5	532.072
13.0	528.199
13.5	524.029
14.0	519.560
14.5	515.091
15.0	510.027
15.5	504.962
16.0	499.302
16.5	493.642
17.0	487.683
17.5	481.427
18.0	474.873
18.5	467.723
19.0	460.275
19.5	452.232
20.0	443.890
20.5	435.251
21.0	426.015
21.5	416.482
22.0	406.055
22.5	395.628
23.0	384.605
23.5	373.285
24.0	361.368
24.5	349.452
25.0	337.237
25.5	324.427
26.0	311.319
26.5	298.211

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**CANDELA TABULATION - (Cont.)**

27.0	285.192
27.5	272.114
28.0	258.916
28.5	245.778
29.0	232.342
29.5	218.817
30.0	205.411
30.5	192.213
31.0	179.195
31.5	166.623
32.0	154.527
32.5	143.088
33.0	132.482
33.5	122.651
34.0	113.505
34.5	105.133
35.0	97.537
35.5	90.565
36.0	84.250
36.5	78.589
37.0	73.555
37.5	69.056
38.0	64.975
38.5	61.340
39.0	58.153
39.5	55.352
40.0	52.850
40.5	50.675
41.0	48.739
41.5	47.011
42.0	45.461
42.5	44.091
43.0	42.840
43.5	41.738
44.0	40.695
44.5	39.742
45.0	38.848
45.5	37.984
46.0	37.180
46.5	36.375
47.0	35.630
47.5	34.886
48.0	34.141
48.5	33.426
49.0	32.711
49.5	31.996
50.0	31.311
50.5	30.655
51.0	29.970
51.5	29.315
52.0	28.689
52.5	28.034
53.0	27.408
53.5	26.782
54.0	26.157
54.5	25.531

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**CANDELA TABULATION - (Cont.)**

55.0	24.935
55.5	24.339
56.0	23.744
56.5	23.148
57.0	22.552
57.5	21.986
58.0	21.390
58.5	20.824
59.0	20.258
59.5	19.722
60.0	19.156
60.5	18.590
61.0	18.024
61.5	17.487
62.0	16.921
62.5	16.385
63.0	15.849
63.5	15.313
64.0	14.776
64.5	14.240
65.0	13.734
65.5	13.227
66.0	12.721
66.5	12.185
67.0	11.708
67.5	11.231
68.0	10.725
68.5	10.248
69.0	9.772
69.5	9.295
70.0	8.848
70.5	8.371
71.0	7.924
71.5	7.448
72.0	7.001
72.5	6.554
73.0	6.107
73.5	5.660
74.0	5.243
74.5	4.796
75.0	4.379
75.5	3.992
76.0	3.605
76.5	3.307
77.0	3.039
77.5	2.800
78.0	2.622
78.5	2.473
79.0	2.354
79.5	2.234
80.0	2.085
80.5	1.966
81.0	1.847
81.5	1.728
82.0	1.579
82.5	1.460

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CANDELA TABULATION - (Cont.)

83.0	1.370
83.5	1.251
84.0	1.132
84.5	1.013
85.0	0.894
85.5	0.804
86.0	0.685
86.5	0.596
87.0	0.477
87.5	0.387
88.0	0.298
88.5	0.209
89.0	0.119
89.5	0.089
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
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127.0	0.000
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128.0	0.000
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129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
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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	195.48	N.A.	40.30
0-30	346.05	N.A.	71.40
0-40	412.30	N.A.	85.00
0-60	465.26	N.A.	95.90
0-80	483.93	N.A.	99.80
0-90	484.96	N.A.	100.00
10-90	431.20	N.A.	88.90
20-40	216.82	N.A.	44.70
20-50	247.43	N.A.	51.00
40-70	66.61	N.A.	13.70
60-80	18.67	N.A.	3.80
70-80	5.02	N.A.	1.00
80-90	1.03	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	484.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	53.76
10-20	141.72
20-30	150.57
30-40	66.25
40-50	30.61
50-60	22.35
60-70	13.65
70-80	5.02
80-90	1.03
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	84	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

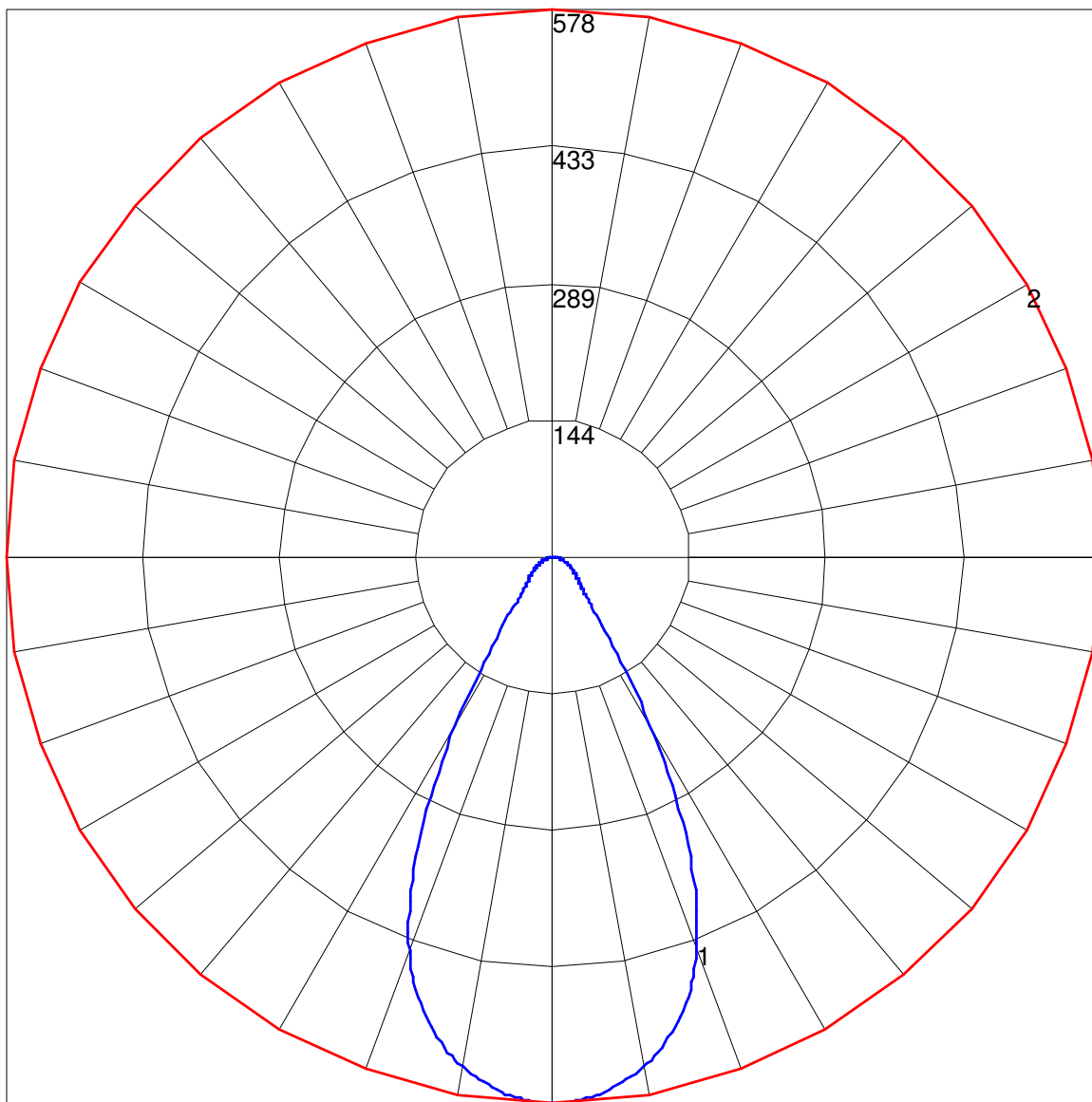
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**UGR TABLE - CORRECTED**

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					UGR Viewed Endwise				
X=2H	Y=2H	16.4	17.5	16.8	17.8	18.1	16.4	17.5	16.8	17.8	18.1
	3H	17.4	18.4	17.8	18.7	19.1	17.4	18.4	17.8	18.7	19.1
	4H	17.6	18.5	18.0	18.9	19.3	17.6	18.5	18.0	18.9	19.3
	6H	17.6	18.5	18.1	18.9	19.3	17.6	18.5	18.1	18.9	19.3
	8H	17.6	18.4	18.1	18.8	19.2	17.6	18.4	18.1	18.8	19.2
	12H	17.6	18.4	18.1	18.8	19.2	17.6	18.4	18.1	18.8	19.2
4H	2H	16.7	17.6	17.1	18.0	18.4	16.7	17.6	17.1	18.0	18.4
	3H	17.9	18.6	18.3	19.1	19.5	17.9	18.6	18.3	19.1	19.5
	4H	18.1	18.8	18.6	19.2	19.7	18.1	18.8	18.6	19.2	19.7
	6H	18.2	18.8	18.7	19.2	19.7	18.2	18.8	18.7	19.2	19.7
	8H	18.2	18.7	18.7	19.2	19.7	18.2	18.7	18.7	19.2	19.7
	12H	18.2	18.7	18.7	19.2	19.6	18.2	18.7	18.7	19.2	19.6
8H	4H	18.1	18.7	18.6	19.1	19.6	18.1	18.7	18.6	19.1	19.6
	6H	18.3	18.7	18.8	19.2	19.7	18.3	18.7	18.8	19.2	19.7
	8H	18.3	18.7	18.8	19.2	19.7	18.3	18.7	18.8	19.2	19.7
	12H	18.3	18.6	18.8	19.1	19.7	18.3	18.6	18.8	19.1	19.7
12H	4H	18.1	18.5	18.6	19.0	19.5	18.1	18.5	18.6	19.0	19.5
	6H	18.2	18.6	18.8	19.1	19.6	18.2	18.6	18.8	19.1	19.6
	8H	18.3	18.6	18.8	19.1	19.7	18.3	18.6	18.8	19.1	19.7

Maximum UGR = 19.7

POLAR GRAPH



Maximum Candela = 577.951 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.)