

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-850-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-L5-850-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	490
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	73
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	17559	17559	17559
55	13895	13895	13895
65	10387	10387	10387
75	5408	5408	5408
85	3279	3279	3279

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CANDELA TABULATION

	<u>0</u>
0.0	583.673
0.5	583.673
1.0	583.372
1.5	583.071
2.0	583.071
2.5	582.470
3.0	581.567
3.5	580.364
4.0	579.160
4.5	577.957
5.0	576.151
5.5	574.647
6.0	572.842
6.5	570.736
7.0	568.630
7.5	566.524
8.0	564.418
8.5	562.011
9.0	559.303
9.5	556.896
10.0	554.189
10.5	551.180
11.0	547.870
11.5	544.561
12.0	540.951
12.5	537.340
13.0	533.429
13.5	529.217
14.0	524.704
14.5	520.191
15.0	515.076
15.5	509.962
16.0	504.245
16.5	498.529
17.0	492.512
17.5	486.194
18.0	479.575
18.5	472.354
19.0	464.832
19.5	456.709
20.0	448.285
20.5	439.560
21.0	430.233
21.5	420.606
22.0	410.075
22.5	399.545
23.0	388.413
23.5	376.981
24.0	364.946
24.5	352.912
25.0	340.576
25.5	327.639
26.0	314.401
26.5	301.163

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CANDELA TABULATION - (Cont.)

27.0	288.016
27.5	274.808
28.0	261.480
28.5	248.211
29.0	234.643
29.5	220.983
30.0	207.445
30.5	194.116
31.0	180.969
31.5	168.272
32.0	156.057
32.5	144.504
33.0	133.794
33.5	123.865
34.0	114.629
34.5	106.174
35.0	98.502
35.5	91.462
36.0	85.084
36.5	79.368
37.0	74.283
37.5	69.740
38.0	65.618
38.5	61.948
39.0	58.728
39.5	55.900
40.0	53.373
40.5	51.177
41.0	49.221
41.5	47.476
42.0	45.912
42.5	44.528
43.0	43.264
43.5	42.151
44.0	41.098
44.5	40.135
45.0	39.232
45.5	38.360
46.0	37.548
46.5	36.735
47.0	35.983
47.5	35.231
48.0	34.479
48.5	33.757
49.0	33.035
49.5	32.313
50.0	31.621
50.5	30.959
51.0	30.267
51.5	29.605
52.0	28.973
52.5	28.311
53.0	27.679
53.5	27.048
54.0	26.416
54.5	25.784

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CANDELA TABULATION - (Cont.)

55.0	25.182
55.5	24.580
56.0	23.979
56.5	23.377
57.0	22.775
57.5	22.204
58.0	21.602
58.5	21.030
59.0	20.459
59.5	19.917
60.0	19.345
60.5	18.774
61.0	18.202
61.5	17.661
62.0	17.089
62.5	16.547
63.0	16.006
63.5	15.464
64.0	14.923
64.5	14.381
65.0	13.870
65.5	13.358
66.0	12.847
66.5	12.305
67.0	11.824
67.5	11.343
68.0	10.831
68.5	10.350
69.0	9.868
69.5	9.387
70.0	8.936
70.5	8.454
71.0	8.003
71.5	7.522
72.0	7.070
72.5	6.619
73.0	6.168
73.5	5.716
74.0	5.295
74.5	4.844
75.0	4.423
75.5	4.032
76.0	3.640
76.5	3.340
77.0	3.069
77.5	2.828
78.0	2.648
78.5	2.497
79.0	2.377
79.5	2.256
80.0	2.106
80.5	1.986
81.0	1.865
81.5	1.745
82.0	1.595
82.5	1.474

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CANDELA TABULATION - (Cont.)

83.0	1.384
83.5	1.264
84.0	1.143
84.5	1.023
85.0	0.903
85.5	0.812
86.0	0.692
86.5	0.602
87.0	0.481
87.5	0.391
88.0	0.301
88.5	0.211
89.0	0.120
89.5	0.090
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
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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
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158.0	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	197.42	N.A.	40.30
0-30	349.48	N.A.	71.40
0-40	416.39	N.A.	85.00
0-60	469.87	N.A.	95.90
0-80	488.72	N.A.	99.80
0-90	489.76	N.A.	100.00
10-90	435.47	N.A.	88.90
20-40	218.97	N.A.	44.70
20-50	249.88	N.A.	51.00
40-70	67.27	N.A.	13.70
60-80	18.85	N.A.	3.80
70-80	5.07	N.A.	1.00
80-90	1.04	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	489.76	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	54.29
10-20	143.13
20-30	152.06
30-40	66.91
40-50	30.91
50-60	22.57
60-70	13.79
70-80	5.07
80-90	1.04
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	96	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	74	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	54	51	59	54	51	50

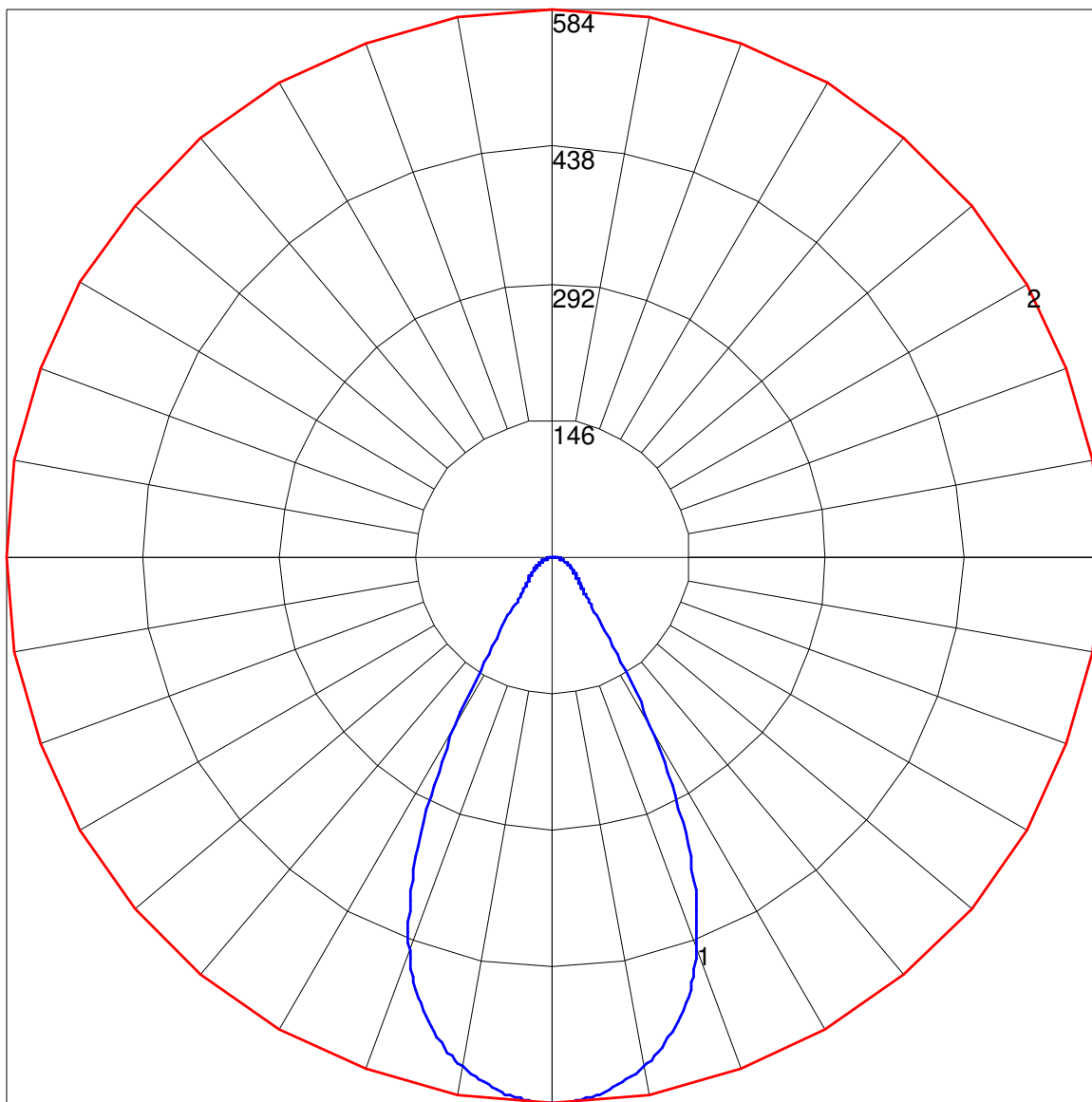
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UGR TABLE - CORRECTED

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	19.2	17.6	18.5	18.1	18.9	19.2
	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 = 583.673 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.)