

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-840-DIM-UNV-RW-OF-BL_.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-BL_
[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	391
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	58
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	14016	14016	14016
55	11091	11091	11091
65	8291	8291	8291
75	4316	4316	4316
85	2614	2614	2614

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CANDELA TABULATION

	<u>0</u>
0.0	465.899
0.5	465.899
1.0	465.659
1.5	465.419
2.0	465.419
2.5	464.939
3.0	464.218
3.5	463.257
4.0	462.297
4.5	461.336
5.0	459.895
5.5	458.695
6.0	457.254
6.5	455.573
7.0	453.891
7.5	452.210
8.0	450.529
8.5	448.608
9.0	446.447
9.5	444.525
10.0	442.364
10.5	439.963
11.0	437.321
11.5	434.679
12.0	431.797
12.5	428.915
13.0	425.793
13.5	422.431
14.0	418.829
14.5	415.227
15.0	411.144
15.5	407.061
16.0	402.498
16.5	397.936
17.0	393.132
17.5	388.089
18.0	382.806
18.5	377.042
19.0	371.038
19.5	364.554
20.0	357.830
20.5	350.865
21.0	343.421
21.5	335.736
22.0	327.330
22.5	318.925
23.0	310.039
23.5	300.913
24.0	291.307
24.5	281.701
25.0	271.855
25.5	261.528
26.0	250.961
26.5	240.394

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CANDELA TABULATION - (Cont.)

27.0	229.900
27.5	219.357
28.0	208.718
28.5	198.127
29.0	187.296
29.5	176.393
30.0	165.586
30.5	154.947
31.0	144.453
31.5	134.318
32.0	124.568
32.5	115.346
33.0	106.797
33.5	98.871
34.0	91.499
34.5	84.750
35.0	78.626
35.5	73.007
36.0	67.916
36.5	63.353
37.0	59.294
37.5	55.668
38.0	52.378
38.5	49.448
39.0	46.878
39.5	44.621
40.0	42.603
40.5	40.850
41.0	39.289
41.5	37.896
42.0	36.648
42.5	35.543
43.0	34.534
43.5	33.646
44.0	32.805
44.5	32.037
45.0	31.316
45.5	30.620
46.0	29.971
46.5	29.323
47.0	28.722
47.5	28.122
48.0	27.522
48.5	26.945
49.0	26.369
49.5	25.793
50.0	25.240
50.5	24.712
51.0	24.160
51.5	23.631
52.0	23.127
52.5	22.599
53.0	22.094
53.5	21.590
54.0	21.086
54.5	20.581

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CANDELA TABULATION - (Cont.)

55.0	20.101
55.5	19.621
56.0	19.140
56.5	18.660
57.0	18.180
57.5	17.723
58.0	17.243
58.5	16.787
59.0	16.330
59.5	15.898
60.0	15.442
60.5	14.986
61.0	14.529
61.5	14.097
62.0	13.641
62.5	13.208
63.0	12.776
63.5	12.344
64.0	11.912
64.5	11.479
65.0	11.071
65.5	10.663
66.0	10.255
66.5	9.822
67.0	9.438
67.5	9.054
68.0	8.646
68.5	8.261
69.0	7.877
69.5	7.493
70.0	7.133
70.5	6.748
71.0	6.388
71.5	6.004
72.0	5.644
72.5	5.283
73.0	4.923
73.5	4.563
74.0	4.227
74.5	3.866
75.0	3.530
75.5	3.218
76.0	2.906
76.5	2.666
77.0	2.450
77.5	2.257
78.0	2.113
78.5	1.993
79.0	1.897
79.5	1.801
80.0	1.681
80.5	1.585
81.0	1.489
81.5	1.393
82.0	1.273
82.5	1.177

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CANDELA TABULATION - (Cont.)

83.0	1.105
83.5	1.009
84.0	0.913
84.5	0.817
85.0	0.720
85.5	0.648
86.0	0.552
86.5	0.480
87.0	0.384
87.5	0.312
88.0	0.240
88.5	0.168
89.0	0.096
89.5	0.072
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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125.0	0.000
125.5	0.000
126.0	0.000
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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	157.58	N.A.	40.30
0-30	278.96	N.A.	71.40
0-40	332.37	N.A.	85.00
0-60	375.06	N.A.	95.90
0-80	390.10	N.A.	99.80
0-90	390.93	N.A.	100.00
10-90	347.60	N.A.	88.90
20-40	174.79	N.A.	44.70
20-50	199.46	N.A.	51.00
40-70	53.69	N.A.	13.70
60-80	15.05	N.A.	3.80
70-80	4.04	N.A.	1.00
80-90	0.83	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	390.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	43.34
10-20	114.25
20-30	121.38
30-40	53.41
40-50	24.67
50-60	18.02
60-70	11.00
70-80	4.04
80-90	0.83
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

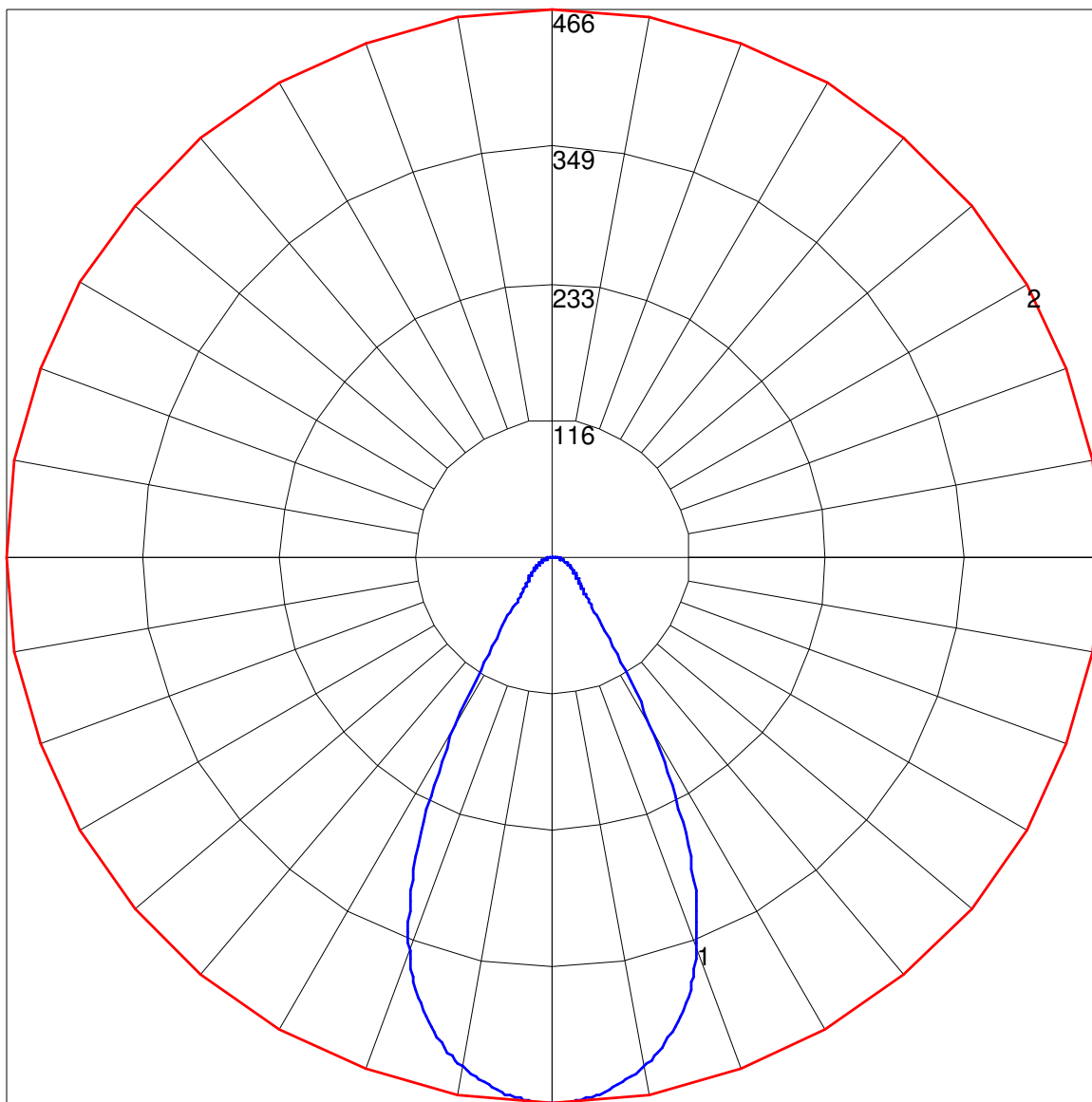
Reflectances

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	15.7	16.8	16.1	17.1	17.4	15.7	16.8	16.1	17.1	17.4
	3H	16.7	17.7	17.1	18.0	18.4	16.7	17.7	17.1	18.0	18.4
	4H	16.9	17.8	17.3	18.2	18.6	16.9	17.8	17.3	18.2	18.6
	6H	17.0	17.8	17.4	18.2	18.6	17.0	17.8	17.4	18.2	18.6
	8H	17.0	17.7	17.4	18.1	18.5	17.0	17.7	17.4	18.1	18.5
	12H	16.9	17.7	17.4	18.1	18.5	16.9	17.7	17.4	18.1	18.5
4H	2H	16.0	16.9	16.4	17.3	17.7	16.0	16.9	16.4	17.3	17.7
	3H	17.2	18.0	17.6	18.4	18.8	17.2	18.0	17.6	18.4	18.8
	4H	17.4	18.1	17.9	18.5	19.0	17.4	18.1	17.9	18.5	19.0
	6H	17.5	18.1	18.0	18.5	19.0	17.5	18.1	18.0	18.5	19.0
	8H	17.5	18.0	18.0	18.5	19.0	17.5	18.0	18.0	18.5	19.0
	12H	17.5	18.0	18.0	18.5	18.9	17.5	18.0	18.0	18.5	18.9
8H	4H	17.4	18.0	17.9	18.4	18.9	17.4	18.0	17.9	18.4	18.9
	6H	17.6	18.0	18.1	18.5	19.0	17.6	18.0	18.1	18.5	19.0
	8H	17.6	18.0	18.1	18.5	19.0	17.6	18.0	18.1	18.5	19.0
	12H	17.6	18.0	18.1	18.4	19.0	17.6	18.0	18.1	18.4	19.0
12H	4H	17.4	17.9	17.9	18.3	18.8	17.4	17.9	17.9	18.3	18.8
	6H	17.5	17.9	18.1	18.4	18.9	17.5	17.9	18.1	18.4	18.9
	8H	17.6	17.9	18.1	18.4	19.0	17.6	17.9	18.1	18.4	19.0

Maximum UGR = 19.0

POLAR GRAPH



Maximum Candela = 465.899 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.)