

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L14-840-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-L14-840-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	1354
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
Total Luminaire Watts	17.3
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	48542	48542	48542
55	38411	38411	38411
65	28713	28713	28713
75	14950	14950	14950
85	9060	9060	9060

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CANDELA TABULATION

	<u>0</u>
0.0	1613.544
0.5	1613.544
1.0	1612.712
1.5	1611.881
2.0	1611.881
2.5	1610.217
3.0	1607.722
3.5	1604.395
4.0	1601.068
4.5	1597.741
5.0	1592.751
5.5	1588.592
6.0	1583.602
6.5	1577.780
7.0	1571.958
7.5	1566.136
8.0	1560.314
8.5	1553.660
9.0	1546.175
9.5	1539.521
10.0	1532.035
10.5	1523.718
11.0	1514.569
11.5	1505.420
12.0	1495.439
12.5	1485.459
13.0	1474.646
13.5	1463.002
14.0	1450.526
14.5	1438.050
15.0	1423.911
15.5	1409.772
16.0	1393.969
16.5	1378.166
17.0	1361.532
17.5	1344.066
18.0	1325.768
18.5	1305.806
19.0	1285.013
19.5	1262.557
20.0	1239.268
20.5	1215.148
21.0	1189.365
21.5	1162.750
22.0	1133.640
22.5	1104.529
23.0	1073.755
23.5	1042.150
24.0	1008.881
24.5	975.612
25.0	941.511
25.5	905.747
26.0	869.151
26.5	832.556

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CANDELA TABULATION - (Cont.)

27.0	796.209
27.5	759.697
28.0	722.851
28.5	686.172
29.0	648.661
29.5	610.901
30.0	573.474
30.5	536.628
31.0	500.282
31.5	465.183
32.0	431.415
32.5	399.477
33.0	369.868
33.5	342.421
34.0	316.887
34.5	293.515
35.0	272.306
35.5	252.844
36.0	235.211
36.5	219.409
37.0	205.353
37.5	192.794
38.0	181.399
38.5	171.252
39.0	162.352
39.5	154.534
40.0	147.548
40.5	141.476
41.0	136.070
41.5	131.246
42.0	126.921
42.5	123.095
43.0	119.602
43.5	116.525
44.0	113.613
44.5	110.952
45.0	108.457
45.5	106.045
46.0	103.799
46.5	101.553
47.0	99.474
47.5	97.395
48.0	95.316
48.5	93.319
49.0	91.323
49.5	89.327
50.0	87.414
50.5	85.584
51.0	83.671
51.5	81.842
52.0	80.095
52.5	78.265
53.0	76.519
53.5	74.772
54.0	73.025
54.5	71.279

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CANDELA TABULATION - (Cont.)

55.0	69.615
55.5	67.952
56.0	66.288
56.5	64.625
57.0	62.961
57.5	61.381
58.0	59.718
58.5	58.137
59.0	56.557
59.5	55.060
60.0	53.480
60.5	51.900
61.0	50.319
61.5	48.822
62.0	47.242
62.5	45.745
63.0	44.248
63.5	42.751
64.0	41.254
64.5	39.756
65.0	38.342
65.5	36.929
66.0	35.515
66.5	34.018
67.0	32.687
67.5	31.356
68.0	29.942
68.5	28.611
69.0	27.281
69.5	25.950
70.0	24.702
70.5	23.371
71.0	22.124
71.5	20.793
72.0	19.546
72.5	18.298
73.0	17.050
73.5	15.803
74.0	14.638
74.5	13.391
75.0	12.226
75.5	11.145
76.0	10.064
76.5	9.232
77.0	8.484
77.5	7.818
78.0	7.319
78.5	6.903
79.0	6.571
79.5	6.238
80.0	5.822
80.5	5.489
81.0	5.157
81.5	4.824
82.0	4.408
82.5	4.075

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CANDELA TABULATION - (Cont.)

83.0	3.826
83.5	3.493
84.0	3.161
84.5	2.828
85.0	2.495
85.5	2.246
86.0	1.913
86.5	1.663
87.0	1.331
87.5	1.081
88.0	0.832
88.5	0.582
89.0	0.333
89.5	0.250
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
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
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153.5	0.000
154.0	0.000
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155.5	0.000
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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	545.75	N.A.	40.30
0-30	966.12	N.A.	71.40
0-40	1151.08	N.A.	85.00
0-60	1298.93	N.A.	95.90
0-80	1351.04	N.A.	99.80
0-90	1353.92	N.A.	100.00
10-90	1203.83	N.A.	88.90
20-40	605.33	N.A.	44.70
20-50	690.78	N.A.	51.00
40-70	185.95	N.A.	13.70
60-80	52.11	N.A.	3.80
70-80	14.00	N.A.	1.00
80-90	2.88	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	1353.92	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	150.09
10-20	395.67
20-30	420.37
30-40	184.96
40-50	85.45
50-60	62.39
60-70	38.11
70-80	14.00
80-90	2.88
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

X=2H	Y=2H	20.0	21.1	20.4	21.4	21.7	20.0	21.1	20.4	21.4	21.7
	3H	21.0	22.0	21.4	22.3	22.7	21.0	22.0	21.4	22.3	22.7
	4H	21.2	22.1	21.6	22.5	22.9	21.2	22.1	21.6	22.5	22.9
	6H	21.2	22.1	21.7	22.5	22.9	21.2	22.1	21.7	22.5	22.9
	8H	21.2	22.0	21.7	22.4	22.8	21.2	22.0	21.7	22.4	22.8
	12H	21.2	22.0	21.7	22.4	22.8	21.2	22.0	21.7	22.4	22.8

UGR Viewed Endwise

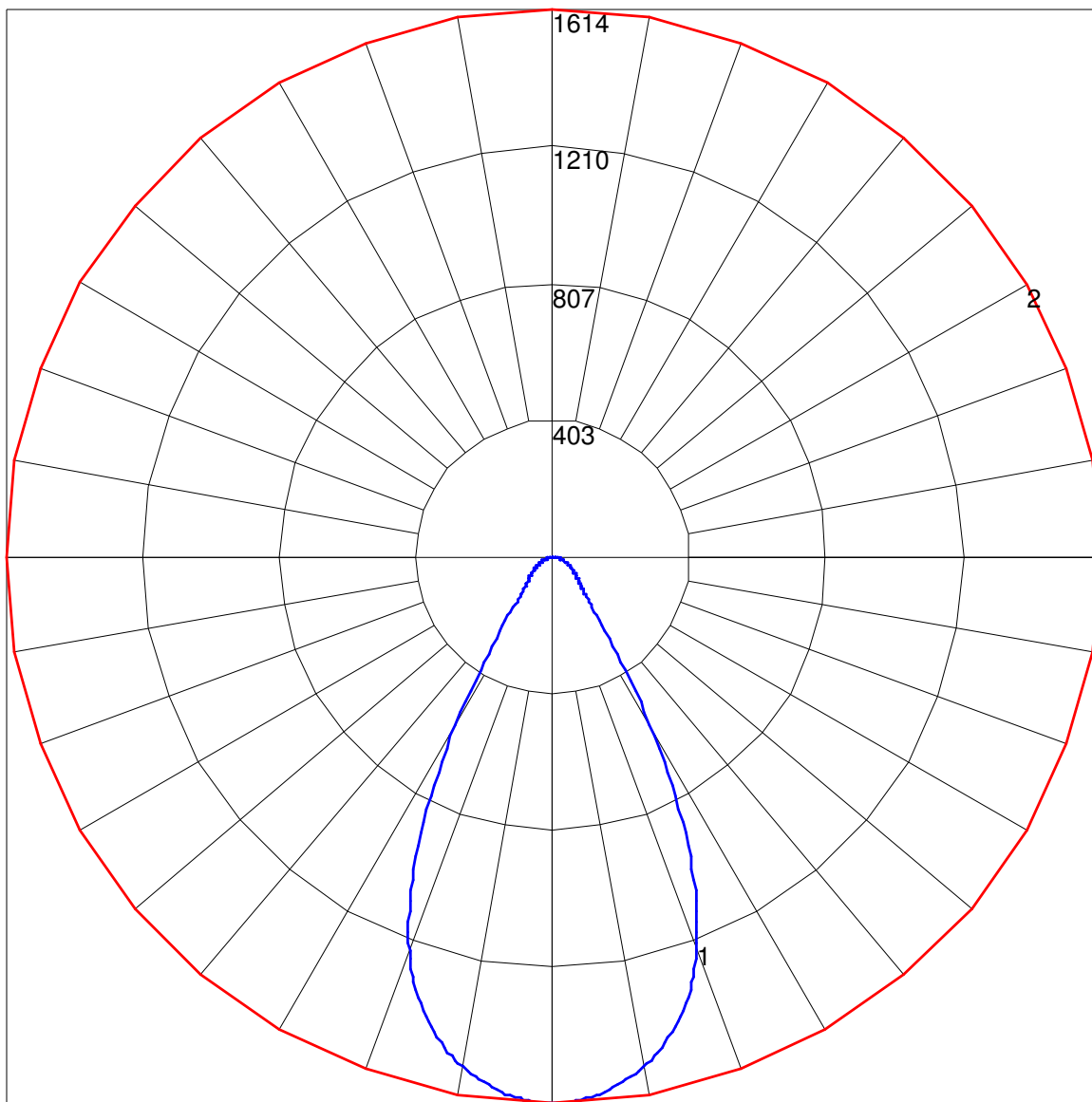
4H	2H	20.3	21.2	20.7	21.6	22.0	20.3	21.2	20.7	21.6	22.0
	3H	21.5	22.2	21.9	22.7	23.1	21.5	22.2	21.9	22.7	23.1
	4H	21.7	22.4	22.2	22.8	23.3	21.7	22.4	22.2	22.8	23.3
	6H	21.8	22.4	22.3	22.8	23.3	21.8	22.4	22.3	22.8	23.3
	8H	21.8	22.3	22.3	22.8	23.3	21.8	22.3	22.3	22.8	23.3
	12H	21.8	22.3	22.3	22.8	23.2	21.8	22.3	22.3	22.8	23.2

8H	4H	21.7	22.3	22.2	22.7	23.2	21.7	22.3	22.2	22.7	23.2
	6H	21.9	22.3	22.4	22.8	23.3	21.9	22.3	22.4	22.8	23.3
	8H	21.9	22.3	22.4	22.8	23.3	21.9	22.3	22.4	22.8	23.3
	12H	21.9	22.2	22.4	22.7	23.3	21.9	22.2	22.4	22.7	23.3

12H	4H	21.7	22.2	22.2	22.6	23.1	21.7	22.2	22.2	22.6	23.1
	6H	21.8	22.2	22.4	22.7	23.2	21.8	22.2	22.4	22.7	23.2
	8H	21.9	22.2	22.4	22.7	23.3	21.9	22.2	22.4	22.7	23.3

Maximum UGR = 23.3

POLAR GRAPH



Maximum Candela = 1613.544 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.)