

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-950-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-L18-950-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	1511
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	63
Total Luminaire Watts	23.9
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	54166	54166	54166
55	42862	42862	42862
65	32040	32040	32040
75	16682	16682	16682
85	10109	10109	10109

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CANDELA TABULATION

	<u>0</u>
0.0	1800.488
0.5	1800.488
1.0	1799.560
1.5	1798.632
2.0	1798.632
2.5	1796.776
3.0	1793.991
3.5	1790.279
4.0	1786.567
4.5	1782.854
5.0	1777.286
5.5	1772.645
6.0	1767.077
6.5	1760.580
7.0	1754.084
7.5	1747.587
8.0	1741.090
8.5	1733.666
9.0	1725.313
9.5	1717.888
10.0	1709.535
10.5	1700.255
11.0	1690.046
11.5	1679.837
12.0	1668.700
12.5	1657.563
13.0	1645.497
13.5	1632.504
14.0	1618.583
14.5	1604.662
15.0	1588.884
15.5	1573.107
16.0	1555.473
16.5	1537.839
17.0	1519.278
17.5	1499.788
18.0	1479.370
18.5	1457.096
19.0	1433.894
19.5	1408.835
20.0	1382.849
20.5	1355.934
21.0	1327.164
21.5	1297.465
22.0	1264.982
22.5	1232.499
23.0	1198.160
23.5	1162.892
24.0	1125.769
24.5	1088.645
25.0	1050.594
25.5	1010.686
26.0	969.850
26.5	929.015

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CANDELA TABULATION - (Cont.)

27.0	888.457
27.5	847.714
28.0	806.600
28.5	765.671
29.0	723.815
29.5	681.680
30.0	639.916
30.5	598.801
31.0	558.244
31.5	519.079
32.0	481.398
32.5	445.760
33.0	412.720
33.5	382.093
34.0	353.601
34.5	327.522
35.0	303.856
35.5	282.138
36.0	262.463
36.5	244.829
37.0	229.145
37.5	215.130
38.0	202.416
38.5	191.093
39.0	181.162
39.5	172.438
40.0	164.643
40.5	157.868
41.0	151.835
41.5	146.452
42.0	141.626
42.5	137.357
43.0	133.459
43.5	130.025
44.0	126.777
44.5	123.807
45.0	121.022
45.5	118.331
46.0	115.825
46.5	113.319
47.0	110.999
47.5	108.679
48.0	106.359
48.5	104.131
49.0	101.904
49.5	99.676
50.0	97.542
50.5	95.500
51.0	93.366
51.5	91.324
52.0	89.375
52.5	87.333
53.0	85.384
53.5	83.435
54.0	81.486
54.5	79.537

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CANDELA TABULATION - (Cont.)

55.0	77.681
55.5	75.825
56.0	73.968
56.5	72.112
57.0	70.256
57.5	68.493
58.0	66.637
58.5	64.873
59.0	63.110
59.5	61.439
60.0	59.676
60.5	57.913
61.0	56.149
61.5	54.479
62.0	52.715
62.5	51.045
63.0	49.374
63.5	47.704
64.0	46.033
64.5	44.363
65.0	42.785
65.5	41.207
66.0	39.629
66.5	37.959
67.0	36.474
67.5	34.989
68.0	33.411
68.5	31.926
69.0	30.441
69.5	28.956
70.0	27.564
70.5	26.079
71.0	24.687
71.5	23.202
72.0	21.810
72.5	20.418
73.0	19.026
73.5	17.634
74.0	16.334
74.5	14.942
75.0	13.643
75.5	12.436
76.0	11.230
76.5	10.302
77.0	9.466
77.5	8.724
78.0	8.167
78.5	7.703
79.0	7.332
79.5	6.961
80.0	6.497
80.5	6.125
81.0	5.754
81.5	5.383
82.0	4.919
82.5	4.548

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CANDELA TABULATION - (Cont.)

83.0	4.269
83.5	3.898
84.0	3.527
84.5	3.155
85.0	2.784
85.5	2.506
86.0	2.135
86.5	1.856
87.0	1.485
87.5	1.207
88.0	0.928
88.5	0.650
89.0	0.371
89.5	0.278
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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120.5	0.000
121.0	0.000
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122.0	0.000
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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
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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
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156.5	0.000
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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	608.98	N.A.	40.30
0-30	1078.06	N.A.	71.40
0-40	1284.45	N.A.	85.00
0-60	1449.42	N.A.	95.90
0-80	1507.57	N.A.	99.80
0-90	1510.78	N.A.	100.00
10-90	1343.31	N.A.	88.90
20-40	675.46	N.A.	44.70
20-50	770.82	N.A.	51.00
40-70	207.50	N.A.	13.70
60-80	58.15	N.A.	3.80
70-80	15.62	N.A.	1.00
80-90	3.21	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	1510.78	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	167.47
10-20	441.51
20-30	469.07
30-40	206.39
40-50	95.35
50-60	69.62
60-70	42.52
70-80	15.62
80-90	3.21
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	20.4	21.5	20.8	21.8	22.1	20.4	21.5	20.8	21.8	22.1
	3H	21.4	22.4	21.8	22.7	23.1	21.4	22.4	21.8	22.7	23.1
	4H	21.6	22.5	22.0	22.9	23.3	21.6	22.5	22.0	22.9	23.3
	6H	21.7	22.5	22.1	22.9	23.3	21.7	22.5	22.1	22.9	23.3
	8H	21.7	22.4	22.1	22.8	23.2	21.7	22.4	22.1	22.8	23.2
	12H	21.6	22.4	22.1	22.8	23.2	21.6	22.4	22.1	22.8	23.2

UGR Viewed Endwise

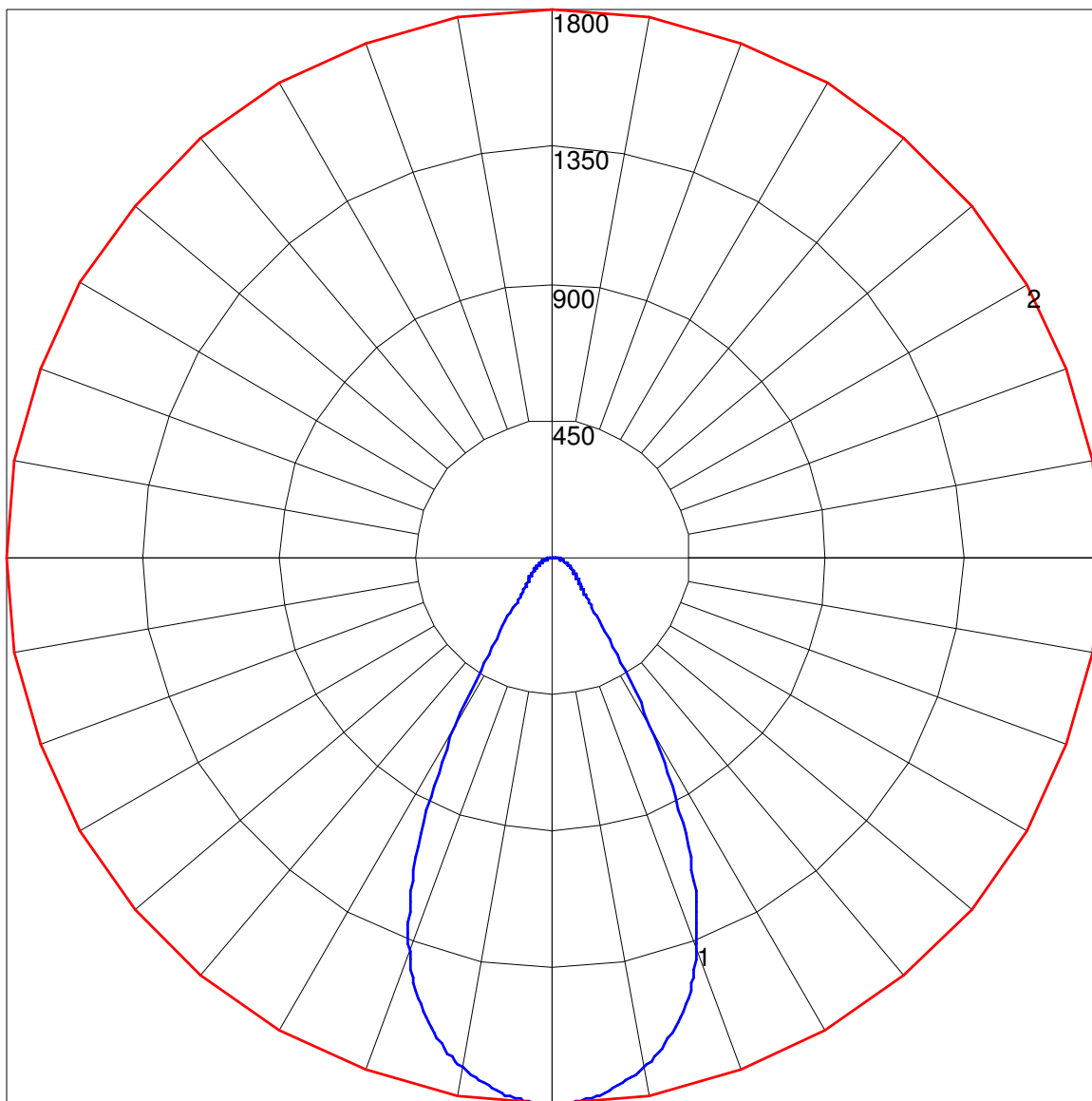
4H	2H	20.7	21.6	21.1	22.0	22.4	20.7	21.6	21.1	22.0	22.4
	3H	21.9	22.6	22.3	23.1	23.5	21.9	22.6	22.3	23.1	23.5
	4H	22.1	22.8	22.6	23.2	23.7	22.1	22.8	22.6	23.2	23.7
	6H	22.2	22.8	22.7	23.2	23.7	22.2	22.8	22.7	23.2	23.7
	8H	22.2	22.7	22.7	23.2	23.7	22.2	22.7	22.7	23.2	23.7
	12H	22.2	22.7	22.7	23.2	23.6	22.2	22.7	22.7	23.2	23.6

8H	4H	22.1	22.7	22.6	23.1	23.6	22.1	22.7	22.6	23.1	23.6
	6H	22.3	22.7	22.8	23.2	23.7	22.3	22.7	22.8	23.2	23.7
	8H	22.3	22.7	22.8	23.2	23.7	22.3	22.7	22.8	23.2	23.7
	12H	22.3	22.7	22.8	23.1	23.7	22.3	22.7	22.8	23.1	23.7

12H	4H	22.1	22.6	22.6	23.0	23.5	22.1	22.6	22.6	23.0	23.5
	6H	22.2	22.6	22.8	23.1	23.6	22.2	22.6	22.8	23.1	23.6
	8H	22.3	22.6	22.8	23.1	23.7	22.3	22.6	22.8	23.1	23.7

Maximum UGR = 23.7

POLAR GRAPH



Maximum Candela = 1800.488 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.)