

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-940-DIM-UNV-RW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 13257153.03
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 2025-05-20
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] V2DR-L18-940-DIM-UNV-RW-OF-WH_
[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	1472
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	62
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	52759	52759	52759
55	41748	41748	41748
65	31207	31207	31207
75	16250	16250	16250
85	9848	9848	9848

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CANDELA TABULATION

	<u>0</u>
0.0	1753.722
0.5	1753.722
1.0	1752.818
1.5	1751.914
2.0	1751.914
2.5	1750.106
3.0	1747.394
3.5	1743.778
4.0	1740.162
4.5	1736.546
5.0	1731.122
5.5	1726.602
6.0	1721.179
6.5	1714.851
7.0	1708.523
7.5	1702.195
8.0	1695.867
8.5	1688.635
9.0	1680.499
9.5	1673.268
10.0	1665.132
10.5	1656.092
11.0	1646.148
11.5	1636.204
12.0	1625.357
12.5	1614.509
13.0	1602.757
13.5	1590.101
14.0	1576.542
14.5	1562.982
15.0	1547.614
15.5	1532.247
16.0	1515.071
16.5	1497.895
17.0	1479.816
17.5	1460.832
18.0	1440.945
18.5	1419.249
19.0	1396.650
19.5	1372.242
20.0	1346.931
20.5	1320.715
21.0	1292.692
21.5	1263.764
22.0	1232.125
22.5	1200.486
23.0	1167.039
23.5	1132.687
24.0	1096.528
24.5	1060.369
25.0	1023.306
25.5	984.435
26.0	944.659
26.5	904.884

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CANDELA TABULATION - (Cont.)

27.0	865.380
27.5	825.696
28.0	785.649
28.5	745.784
29.0	705.014
29.5	663.974
30.0	623.294
30.5	583.248
31.0	543.744
31.5	505.596
32.0	468.895
32.5	434.182
33.0	402.000
33.5	372.169
34.0	344.416
34.5	319.015
35.0	295.963
35.5	274.810
36.0	255.646
36.5	238.470
37.0	223.193
37.5	209.543
38.0	197.158
38.5	186.130
39.0	176.457
39.5	167.960
40.0	160.366
40.5	153.767
41.0	147.891
41.5	142.648
42.0	137.947
42.5	133.789
43.0	129.992
43.5	126.648
44.0	123.484
44.5	120.591
45.0	117.879
45.5	115.257
46.0	112.817
46.5	110.376
47.0	108.116
47.5	105.856
48.0	103.596
48.5	101.427
49.0	99.257
49.5	97.087
50.0	95.008
50.5	93.020
51.0	90.940
51.5	88.952
52.0	87.053
52.5	85.065
53.0	83.166
53.5	81.268
54.0	79.369
54.5	77.471

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CANDELA TABULATION - (Cont.)

55.0	75.663
55.5	73.855
56.0	72.047
56.5	70.239
57.0	68.431
57.5	66.714
58.0	64.906
58.5	63.188
59.0	61.471
59.5	59.843
60.0	58.126
60.5	56.408
61.0	54.691
61.5	53.064
62.0	51.346
62.5	49.719
63.0	48.092
63.5	46.465
64.0	44.837
64.5	43.210
65.0	41.673
65.5	40.137
66.0	38.600
66.5	36.973
67.0	35.526
67.5	34.080
68.0	32.543
68.5	31.097
69.0	29.651
69.5	28.204
70.0	26.848
70.5	25.402
71.0	24.046
71.5	22.600
72.0	21.244
72.5	19.888
73.0	18.532
73.5	17.176
74.0	15.910
74.5	14.554
75.0	13.289
75.5	12.113
76.0	10.938
76.5	10.034
77.0	9.221
77.5	8.497
78.0	7.955
78.5	7.503
79.0	7.141
79.5	6.780
80.0	6.328
80.5	5.966
81.0	5.605
81.5	5.243
82.0	4.791
82.5	4.430

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CANDELA TABULATION - (Cont.)

83.0	4.158
83.5	3.797
84.0	3.435
84.5	3.074
85.0	2.712
85.5	2.441
86.0	2.079
86.5	1.808
87.0	1.446
87.5	1.175
88.0	0.904
88.5	0.633
89.0	0.362
89.5	0.271
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
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119.0	0.000
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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	593.16	N.A.	40.30
0-30	1050.05	N.A.	71.40
0-40	1251.08	N.A.	85.00
0-60	1411.77	N.A.	95.90
0-80	1468.41	N.A.	99.80
0-90	1471.54	N.A.	100.00
10-90	1308.42	N.A.	88.90
20-40	657.92	N.A.	44.70
20-50	750.80	N.A.	51.00
40-70	202.11	N.A.	13.70
60-80	56.64	N.A.	3.80
70-80	15.22	N.A.	1.00
80-90	3.13	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	1471.54	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	163.12
10-20	430.04
20-30	456.89
30-40	201.03
40-50	92.88
50-60	67.81
60-70	41.42
70-80	15.22
80-90	3.13
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	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	75	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	55	51	59	54	51	50

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UGR TABLE - CORRECTED

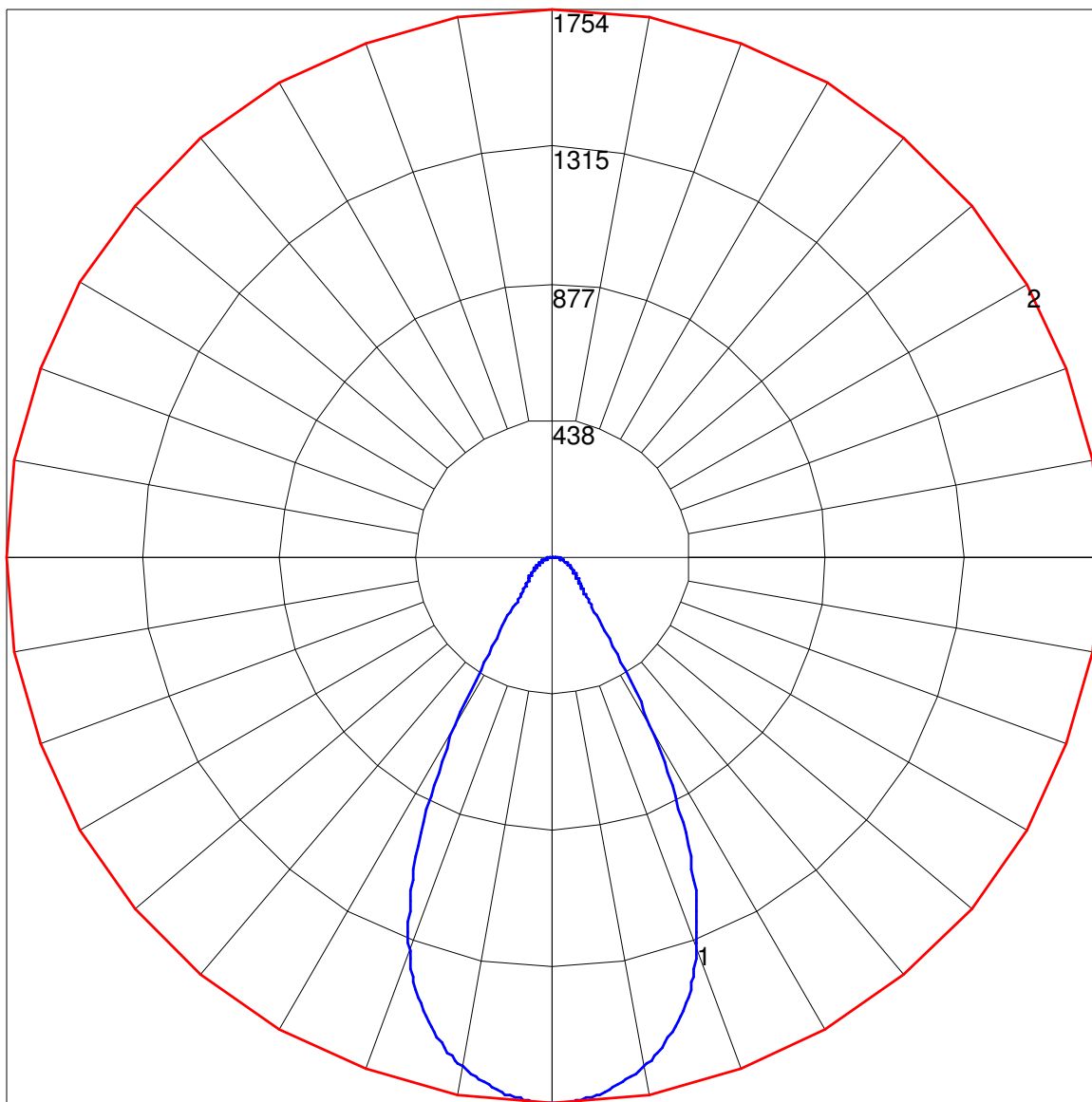
Reflectances

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	20.3	21.4	20.7	21.7	22.0	20.3	21.4	20.7	21.7	22.0
	3H	21.3	22.3	21.7	22.6	23.0	21.3	22.3	21.7	22.6	23.0
	4H	21.5	22.4	21.9	22.8	23.2	21.5	22.4	21.9	22.8	23.2
	6H	21.5	22.4	22.0	22.8	23.1	21.5	22.4	22.0	22.8	23.1
	8H	21.5	22.3	22.0	22.7	23.1	21.5	22.3	22.0	22.7	23.1
	12H	21.5	22.3	22.0	22.7	23.1	21.5	22.3	22.0	22.7	23.1
4H	2H	20.6	21.5	21.0	21.9	22.3	20.6	21.5	21.0	21.9	22.3
	3H	21.8	22.5	22.2	23.0	23.4	21.8	22.5	22.2	23.0	23.4
	4H	22.0	22.7	22.5	23.1	23.6	22.0	22.7	22.5	23.1	23.6
	6H	22.1	22.7	22.6	23.1	23.6	22.1	22.7	22.6	23.1	23.6
	8H	22.1	22.6	22.6	23.1	23.6	22.1	22.6	22.6	23.1	23.6
	12H	22.1	22.6	22.6	23.1	23.5	22.1	22.6	22.6	23.1	23.5
8H	4H	22.0	22.6	22.5	23.0	23.5	22.0	22.6	22.5	23.0	23.5
	6H	22.2	22.6	22.7	23.1	23.6	22.2	22.6	22.7	23.1	23.6
	8H	22.2	22.6	22.7	23.1	23.6	22.2	22.6	22.7	23.1	23.6
	12H	22.2	22.5	22.7	23.0	23.6	22.2	22.5	22.7	23.0	23.6
12H	4H	22.0	22.4	22.5	22.9	23.4	22.0	22.4	22.5	22.9	23.4
	6H	22.1	22.5	22.7	23.0	23.5	22.1	22.5	22.7	23.0	23.5
	8H	22.2	22.5	22.7	23.0	23.6	22.2	22.5	22.7	23.0	23.6

Maximum UGR = 23.6

POLAR GRAPH



Maximum Candela = 1753.722 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.)