

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-940-DIM-UNV-LW-OF_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 13257153.01
[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-LW-OF_
[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, Vandal-Resistant
[SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1516
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)	0.86
Spacing Criterion (90-270)	0.86
Spacing Criterion (Diagonal)	0.78
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	62539	62539	62539
55	54620	54620	54620
65	46659	46659	46659
75	37643	37643	37643
85	21086	21086	21086

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CANDELA TABULATION

	<u>0</u>
0.0	1789.024
0.5	1788.102
1.0	1788.102
1.5	1787.180
2.0	1786.259
2.5	1783.494
3.0	1780.728
3.5	1777.963
4.0	1774.277
4.5	1769.668
5.0	1765.059
5.5	1760.451
6.0	1755.842
6.5	1750.312
7.0	1744.782
7.5	1739.252
8.0	1732.800
8.5	1726.348
9.0	1718.974
9.5	1711.601
10.0	1703.305
10.5	1694.088
11.0	1684.871
11.5	1674.733
12.0	1664.594
12.5	1652.612
13.0	1640.630
13.5	1627.726
14.0	1613.900
14.5	1599.153
15.0	1583.484
15.5	1565.972
16.0	1548.460
16.5	1529.104
17.0	1507.905
17.5	1486.705
18.0	1462.741
18.5	1437.855
19.0	1410.204
19.5	1380.710
20.0	1350.294
20.5	1317.112
21.0	1283.009
21.5	1246.141
22.0	1207.430
22.5	1167.797
23.0	1126.320
23.5	1083.922
24.0	1040.602
24.5	996.360
25.0	951.197
25.5	906.494
26.0	861.238
26.5	816.444

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CANDELA TABULATION - (Cont.)

27.0	772.294
27.5	729.066
28.0	686.760
28.5	645.468
29.0	605.466
29.5	566.478
30.0	529.887
30.5	495.323
31.0	462.694
31.5	432.278
32.0	403.798
32.5	377.345
33.0	353.104
33.5	330.891
34.0	310.706
34.5	292.272
35.0	275.497
35.5	260.289
36.0	246.555
36.5	234.297
37.0	223.236
37.5	213.374
38.0	204.526
38.5	196.507
39.0	189.318
39.5	182.866
40.0	176.967
40.5	171.713
41.0	166.920
41.5	162.496
42.0	158.441
42.5	154.662
43.0	151.251
43.5	148.118
44.0	145.168
44.5	142.403
45.0	139.730
45.5	137.241
46.0	134.845
46.5	132.541
47.0	130.329
47.5	128.117
48.0	125.997
48.5	123.877
49.0	121.757
49.5	119.729
50.0	117.794
50.5	115.858
51.0	113.830
51.5	111.987
52.0	110.051
52.5	108.208
53.0	106.364
53.5	104.521
54.0	102.678
54.5	100.834

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CANDELA TABULATION - (Cont.)

55.0	98.991
55.5	97.147
56.0	95.396
56.5	93.461
57.0	91.709
57.5	89.866
58.0	88.023
58.5	86.179
59.0	84.336
59.5	82.492
60.0	80.649
60.5	78.806
61.0	76.962
61.5	75.027
62.0	73.275
62.5	71.432
63.0	69.496
63.5	67.653
64.0	65.810
64.5	64.058
65.0	62.307
65.5	60.556
66.0	58.805
66.5	57.146
67.0	55.394
67.5	53.827
68.0	52.168
68.5	50.601
69.0	49.035
69.5	47.375
70.0	45.809
70.5	44.242
71.0	42.767
71.5	41.200
72.0	39.633
72.5	38.158
73.0	36.592
73.5	35.117
74.0	33.734
74.5	32.260
75.0	30.785
75.5	29.402
76.0	28.020
76.5	26.637
77.0	25.347
77.5	23.964
78.0	22.674
78.5	21.383
79.0	20.093
79.5	18.803
80.0	17.605
80.5	16.314
81.0	15.116
81.5	13.918
82.0	12.719
82.5	11.521

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CANDELA TABULATION - (Cont.)

83.0	10.415
83.5	9.217
84.0	8.111
84.5	6.913
85.0	5.807
85.5	4.609
86.0	3.410
86.5	2.581
87.0	1.843
87.5	1.106
88.0	0.737
88.5	0.553
89.0	0.369
89.5	0.277
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
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130.0	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
146.0	0.000
146.5	0.000
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151.0	0.000
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152.0	0.000
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153.0	0.000
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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	604.83	N.A.	39.90
0-30	1031.14	N.A.	68.00
0-40	1216.36	N.A.	80.20
0-60	1414.34	N.A.	93.30
0-80	1509.1	N.A.	99.50
0-90	1516.4	N.A.	100.00
10-90	1349.83	N.A.	89.00
20-40	611.53	N.A.	40.30
20-50	720.97	N.A.	47.50
40-70	259.93	N.A.	17.10
60-80	94.76	N.A.	6.20
70-80	32.81	N.A.	2.20
80-90	7.30	N.A.	0.50
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	1516.4	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	166.57
10-20	438.26
20-30	426.31
30-40	185.22
40-50	109.44
50-60	88.53
60-70	61.95
70-80	32.81
80-90	7.30
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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76
4	94	86	80	75	93	85	79	75	83	78	74	81	76	73	79	75	72	70
5	89	80	74	69	88	79	73	69	77	72	68	76	71	68	74	70	67	65
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	63	61
7	81	71	64	60	79	70	64	60	69	63	59	67	63	59	66	62	59	57
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51
10	70	60	54	50	69	59	54	50	58	53	49	58	53	49	57	52	49	48

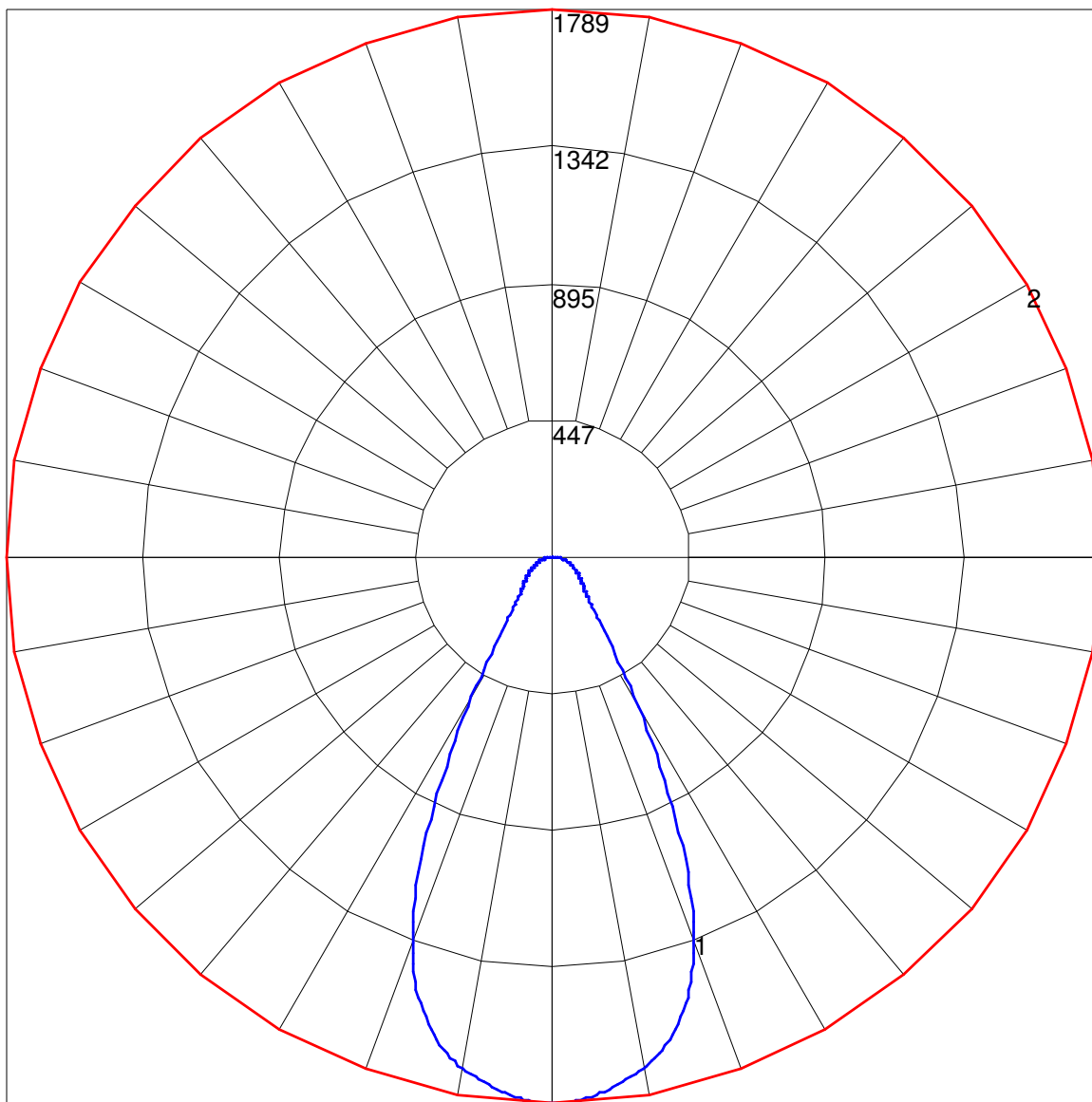
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UGR TABLE - CORRECTED

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	22.2	23.3	22.5	23.7	24.0	22.2	23.3	22.5	23.7	24.0
	3H	23.7	24.7	24.1	25.0	25.4	23.7	24.7	24.1	25.0	25.4
	4H	24.2	25.2	24.6	25.5	25.9	24.2	25.2	24.6	25.5	25.9
	6H	24.5	25.4	24.9	25.8	26.2	24.5	25.4	24.9	25.8	26.2
	8H	24.6	25.5	25.0	25.9	26.3	24.6	25.5	25.0	25.9	26.3
	12H	24.6	25.5	25.1	25.8	26.3	24.6	25.5	25.1	25.8	26.3
4H	2H	22.7	23.6	23.1	24.0	24.4	22.7	23.6	23.1	24.0	24.4
	3H	24.3	25.1	24.7	25.5	25.9	24.3	25.1	24.7	25.5	25.9
	4H	25.0	25.7	25.4	26.1	26.5	25.0	25.7	25.4	26.1	26.5
	6H	25.4	26.0	25.9	26.5	27.0	25.4	26.0	25.9	26.5	27.0
	8H	25.5	26.1	26.0	26.6	27.0	25.5	26.1	26.0	26.6	27.0
	12H	25.6	26.1	26.1	26.6	27.1	25.6	26.1	26.1	26.6	27.1
8H	4H	25.2	25.7	25.6	26.2	26.7	25.2	25.7	25.6	26.2	26.7
	6H	25.7	26.2	26.2	26.7	27.2	25.7	26.2	26.2	26.7	27.2
	8H	25.9	26.3	26.4	26.8	27.3	25.9	26.3	26.4	26.8	27.3
	12H	26.0	26.4	26.5	26.9	27.4	26.0	26.4	26.5	26.9	27.4
12H	4H	25.1	25.7	25.6	26.1	26.6	25.1	25.7	25.6	26.1	26.6
	6H	25.7	26.2	26.3	26.6	27.2	25.7	26.2	26.3	26.6	27.2
	8H	26.0	26.3	26.5	26.8	27.4	26.0	26.3	26.5	26.8	27.4

Maximum UGR = 27.4

POLAR GRAPH



Maximum Candela = 1789.024 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.)