

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L18-940-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.
[ISSUE DATE] 2025-05-20
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] V2DR-L18-940-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	1163
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	49
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	41680	41680	41680
55	32981	32981	32981
65	24654	24654	24654
75	12837	12837	12837
85	7778	7778	7778

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CANDELA TABULATION

	<u>0</u>
0.0	1385.440
0.5	1385.440
1.0	1384.726
1.5	1384.012
2.0	1384.012
2.5	1382.584
3.0	1380.441
3.5	1377.585
4.0	1374.728
4.5	1371.872
5.0	1367.587
5.5	1364.016
6.0	1359.731
6.5	1354.732
7.0	1349.733
7.5	1344.734
8.0	1339.735
8.5	1334.022
9.0	1327.595
9.5	1321.882
10.0	1315.454
10.5	1308.313
11.0	1300.457
11.5	1292.602
12.0	1284.032
12.5	1275.462
13.0	1266.178
13.5	1256.180
14.0	1245.468
14.5	1234.756
15.0	1222.615
15.5	1210.475
16.0	1196.906
16.5	1183.337
17.0	1169.055
17.5	1154.058
18.0	1138.346
18.5	1121.207
19.0	1103.353
19.5	1084.071
20.0	1064.075
20.5	1043.365
21.0	1021.227
21.5	998.374
22.0	973.379
22.5	948.384
23.0	921.961
23.5	894.823
24.0	866.257
24.5	837.692
25.0	808.412
25.5	777.703
26.0	746.281
26.5	714.859

IES INDOOR REPORT**PHOTOMETRIC FILENAME : V2DR-L18-940-DIM-UNV-RW-OF-BL_.IES****CANDELA TABULATION - (Cont.)**

27.0	683.651
27.5	652.300
28.0	620.663
28.5	589.169
29.0	556.961
29.5	524.539
30.0	492.403
30.5	460.766
31.0	429.558
31.5	399.421
32.0	370.427
32.5	343.004
33.0	317.580
33.5	294.013
34.0	272.089
34.5	252.022
35.0	233.811
35.5	217.100
36.0	201.960
36.5	188.391
37.0	176.322
37.5	165.539
38.0	155.755
38.5	147.042
39.0	139.401
39.5	132.688
40.0	126.689
40.5	121.476
41.0	116.834
41.5	112.692
42.0	108.978
42.5	105.693
43.0	102.694
43.5	100.052
44.0	97.552
44.5	95.267
45.0	93.124
45.5	91.053
46.0	89.125
46.5	87.197
47.0	85.412
47.5	83.626
48.0	81.841
48.5	80.127
49.0	78.413
49.5	76.699
50.0	75.057
50.5	73.485
51.0	71.843
51.5	70.272
52.0	68.772
52.5	67.201
53.0	65.701
53.5	64.202
54.0	62.702
54.5	61.202

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55.0	59.774
55.5	58.346
56.0	56.917
56.5	55.489
57.0	54.061
57.5	52.704
58.0	51.276
58.5	49.919
59.0	48.562
59.5	47.276
60.0	45.919
60.5	44.563
61.0	43.206
61.5	41.920
62.0	40.563
62.5	39.278
63.0	37.992
63.5	36.707
64.0	35.422
64.5	34.136
65.0	32.922
65.5	31.708
66.0	30.494
66.5	29.209
67.0	28.066
67.5	26.923
68.0	25.709
68.5	24.567
69.0	23.424
69.5	22.281
70.0	21.210
70.5	20.067
71.0	18.996
71.5	17.854
72.0	16.782
72.5	15.711
73.0	14.640
73.5	13.569
74.0	12.569
74.5	11.498
75.0	10.498
75.5	9.570
76.0	8.641
76.5	7.927
77.0	7.284
77.5	6.713
78.0	6.284
78.5	5.927
79.0	5.642
79.5	5.356
80.0	4.999
80.5	4.713
81.0	4.428
81.5	4.142
82.0	3.785
82.5	3.499

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CANDELA TABULATION - (Cont.)

83.0	3.285
83.5	2.999
84.0	2.714
84.5	2.428
85.0	2.142
85.5	1.928
86.0	1.643
86.5	1.428
87.0	1.143
87.5	0.928
88.0	0.714
88.5	0.500
89.0	0.286
89.5	0.214
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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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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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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Zone	Lumens	%Lamp	%Fixt
0-20	468.60	N.A.	40.30
0-30	829.54	N.A.	71.40
0-40	988.36	N.A.	85.00
0-60	1115.3	N.A.	95.90
0-80	1160.05	N.A.	99.80
0-90	1162.52	N.A.	100.00
10-90	1033.65	N.A.	88.90
20-40	519.76	N.A.	44.70
20-50	593.13	N.A.	51.00
40-70	159.67	N.A.	13.70
60-80	44.74	N.A.	3.80
70-80	12.02	N.A.	1.00
80-90	2.47	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	1162.52	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	128.87
10-20	339.73
20-30	360.94
30-40	158.81
40-50	73.37
50-60	53.57
60-70	32.72
70-80	12.02
80-90	2.47
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	96	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	74	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

X=2H	Y=2H	19.5	20.6	19.9	20.9	21.2	19.5	20.6	19.9	20.9	21.2
	3H	20.5	21.5	20.9	21.8	22.2	20.5	21.5	20.9	21.8	22.2
	4H	20.7	21.6	21.1	22.0	22.4	20.7	21.6	21.1	22.0	22.4
	6H	20.7	21.6	21.2	22.0	22.4	20.7	21.6	21.2	22.0	22.4
	8H	20.7	21.5	21.2	21.9	22.3	20.7	21.5	21.2	21.9	22.3
	12H	20.7	21.5	21.2	21.9	22.3	20.7	21.5	21.2	21.9	22.3

UGR Viewed Endwise

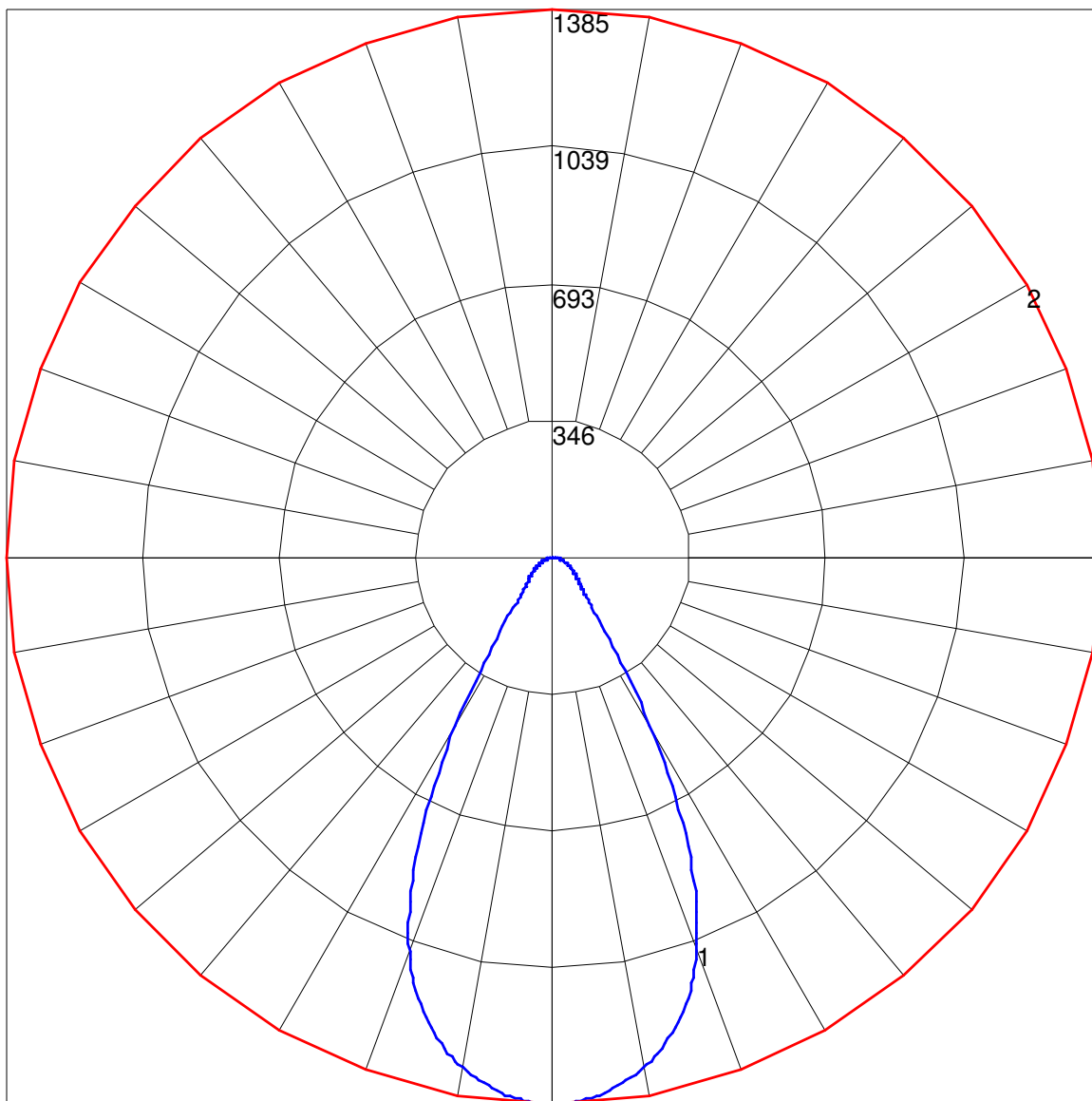
4H	2H	19.8	20.7	20.2	21.1	21.5	19.8	20.7	20.2	21.1	21.5
	3H	21.0	21.7	21.4	22.2	22.6	21.0	21.7	21.4	22.2	22.6
	4H	21.2	21.9	21.7	22.3	22.8	21.2	21.9	21.7	22.3	22.8
	6H	21.3	21.9	21.8	22.3	22.8	21.3	21.9	21.8	22.3	22.8
	8H	21.3	21.8	21.8	22.3	22.8	21.3	21.8	21.8	22.3	22.8
	12H	21.3	21.8	21.8	22.3	22.7	21.3	21.8	21.8	22.3	22.7

8H	4H	21.2	21.8	21.7	22.2	22.7	21.2	21.8	21.7	22.2	22.7
	6H	21.4	21.8	21.9	22.3	22.8	21.4	21.8	21.9	22.3	22.8
	8H	21.4	21.8	21.9	22.3	22.8	21.4	21.8	21.9	22.3	22.8
	12H	21.4	21.7	21.9	22.2	22.8	21.4	21.7	21.9	22.2	22.8

12H	4H	21.2	21.7	21.7	22.1	22.6	21.2	21.7	21.7	22.1	22.6
	6H	21.3	21.7	21.9	22.2	22.7	21.3	21.7	21.9	22.2	22.7
	8H	21.4	21.7	21.9	22.2	22.8	21.4	21.7	21.9	22.2	22.8

Maximum UGR = 22.8

POLAR GRAPH



Maximum Candela = 1385.44 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.)